PART OF A

Lecture

INTRODUCTORY TO THE COURSE GIVEN AT

UNIVERSITY COLLEGE HOSPITAL,

Delivered on November 15th, 1875.

BY SIR HENRY THOMPSON,

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(*Reported by* Mr. G. BUCKSTON BROWNE.)

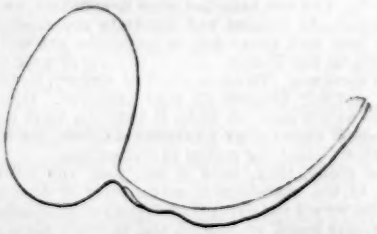
AFTER a few words of introduction, expressive of the pleasure which it gave the lecturer to return to the scene of his former labours for a short time, he defined the nature of the course and its scope, alluding to various minor points in connexion with it. He then said:—

In view of a consideration of the more important affections of the urethra, with which I shall naturally commence, I desire to depart from my usual habit a little to-day, and to speak more at length on a topic which I always allude to slightly, but not otherwise, because it is not part of my plan to teach anatomy and physiology here. But I find it necessary to complain of what I will speak of as the "too mechanical method" of treating urethral diseases, which I think has been obtaining of late in some parts of the Continent, and perhaps in America. What I mean by that will appear as we proceed. I always protest against it in this course of lectures, but something more than this appears to me now to be desirable. I dislike to be polemical in this or any other subject, the practical side of which is so important; and I would infinitely rather for my own peace and comfort simply tell you what I think you ought to do in relation to various circumstances which come before you, and not also have to point out treatment pursued by others which I think you ought to avoid. However, I have the conviction that much of the treatment now in vogue is imperfect and less valuable than it might be, since it is founded on views of the urethra itself which are erroneous; or rather, I should say, it originates in a want of consideration, which appears very widely to exist, as to the nature and function of the urethra.

The treatment of urethral disease of which I complain has its origin in the notion that the urethra is a mere flexible tube, closed at or near its junction with the bladder by some kind of muscular apparatus, sphincteric or otherwise, through which fluids will pass indifferently in either direction. No idea, however, can be more erroneous, and treatment founded on it must be defective.

At the outset, then, let me say that it is absolutely essential that you should have a tolerably accurate knowledge of the nature and functions of this so-called tube.

I draw for you on this board the kind of diagram usually supposed to represent the bladder and male urethra. This diagram has something to answer for in producing the erroneous views I refer to. It represents the urethra as a tube, and as more or less open.



Let me give you an illustration of my meaning, and not an unimportant one. I believe I am correct in stating that almost every patient who presents himself for treatment of a urethral discharge, when advised to use an injection, gets some such advice as this, when the manner of doing it is explained, as it ought to be, in detail:—He is told to inject a certain quantity of liquid into the passage by means of a syringe of some kind, and in doing so he is always admonished to make pressure on the line of the urethra, some four inches from the orifice, in order to prevent the fluid from passing beyond that point, and so perhaps enter or irritate the ducts which open into the prostatic portion, and occasion irritation of the neck of the bladder or a swelled testicle—an idea which is far from correct; and such advice simply demonstrates that the person giving it is not really acquainted with the structure or function of the part he is treating. Want of thought originally has produced, and the influence of ancient tradition perpetuated, the error which vitiates much of our treatment in its various forms.

First, let me assure you that the urethra is not a tube at all, in any sense in which we employ that word. It is not like a gas-pipe, or an india-rubber tube, or even a flaccid tube of any membrane whatever.

It is rather *a continuous closed valve, capable of transmitting fluids and solids in one direction only, and transmitting nothing whatever in the opposite direction, except in obedience to applied force.* Its length in the male makes us think of it as a tube, but this is a mere accident of sex. An inch or less is amply long enough for its urinary function, as in the female; and all the length it possesses above that is quite useless *as a urethra*, and renders it liable to disease and accident—the price, and a heavy one, let me tell you, which the male pays for his specially distinguishing feature. In illustration of this, I have but to refer you to the innumerable difficulties and dangers associated with stricture, retention of urine, and calculus, which are almost unknown in the other sex. It is, then, in the male simply a long valvular chink, traversing soft and most delicate vascular and nervous tissues, always firmly closed, and never opening except for a few seconds, during which fluids have to be transmitted from the body. Then, for a few seconds, it is distended more or less, and becomes a tube if you please, for this short time and this only, equalling, perhaps, at most three minutes in the twenty-four hours. All the rest of the time it is firmly closed, and not one drop of fluid can pass from the bladder. Of course, oozing of liquid which is generated in the walls of the tube, or which enters it by ducts may escape, but always, inevitably, in the outward direction only.

Now, during these few seconds, when the valve may be said to occupy the form of a tube, I have next to observe that it is a tube of very varying diameter in its different parts; it is, in fact, very differently distensible at different places, being surrounded by different structures. This fact has long been known and generally recognised. I will show you illustrations of this from the works of Sir Everard Home and of Mr. Guthrie, who made casts of it in wax and other materials. This point is scarcely of less importance than the preceding one. The annexed diagram is reproduced from Sir E. Home's work.*

Having thus far illustrated briefly, and necessarily somewhat imperfectly, the nature of this valvular passage, let us see how far the ideas which I want you to acquire relative to the urethra affect two important points in practice. First, that simple matter of making an injection into the urethra. You have to introduce a fluid for the purpose of therapeutic contact with the walls of this closed passage; you have to distend it, and some little force is necessary; not a single drop can enter, much less run down into it, unless the liquid is forced in by a piston, while the orifice of the urethra is carefully closed around the tube of the syringe introduced. The walls of the passage lying closely applied to each other become opened only by the pressure of the fluid driven in, and they are distended just so much

* Practical Observations. By Sir E. Home. Vol. I. London, 1806.

and so far as the quantity employed determines. Thus you may safely reckon, as the result of my observation, that a syringe containing one fluid drachm is amply sufficient, and that it will distend the urethra for three and a half or four inches. A half-drachm syringe often suffices. Here is one of each size, and it is scarcely necessary to say that these small instruments are much more easily managed by a patient than larger and longer ones. But most patients, unless specially taught to use the syringe, never introduce any injection at all. Unless the orifice of the urethra is carefully closed at the time, the fluid simply leaves the end of the syringe and flows out by the external meatus; and in every case after the injection has been made, the moment the orifice is unclosed the fluid is rapidly expelled by the contractile force of the urethra, and no appreciable quantity remains within. So much, then, for any fear of its running down to the neck of the bladder. Of course, if an injection is too strong—in my opinion a very frequent occurrence,—the anterior part of the urethra is inflamed, and extension backwards may easily take place; but that is no part of our subject now. But let me further say that, so far from your being able, even with the power of the syringe, to send an injection into the prostatic part of the urethra, you cannot do so by any ordinary force, unless you can at the same time voluntarily relax the muscles which surround the membranous urethra, and so allow the fluid to pass—a thing perfectly possible with very little practice to accomplish. Thus it is that you cannot inject the bladder except by passing an instrument into its cavity. In fact, this valvular passage stoutly resists all intrusion from without, and admits no fluid except in obedience to pressure which it is unable to resist.

I must just remark, in order to anticipate a possible objection to my statement relative to the valvular action of the urethra, and its power to transmit bodies in the outward direction only, that it is well known that certain foreign bodies have been able to pass inwards when introduced by the external meatus. I refer to two typical ones, both of which have been occasionally known to reach the bladder after being fairly lodged within the urethra. I refer to an ear of barley or of rye, both of which you will recollect are bearded, and also to a common hair-pin, which is wedge-shaped. Either of these bodies, if completely introduced, and also in such a manner that the beards or the points are directed outwards, will traverse the urethra in the direction inward. These, however, you will doubtless at once see are not in the least degree exceptions to my statement. It is an old schoolboy's paradox to put an ear of rye in his jacket-sleeve, when, with slight movements of his arm, although directed downwards, the ear soon finds its way upwards to his shoulder. If the arm was kept perfectly motionless there would be no change of place in the ear of rye. So, when introduced within the urethra, the involuntary movements of the urethral muscles, designed to expel the intruder, act on the ends of the bearded corn, or on the ends of the hair-pin, and drive it on in the only direction it can travel—namely, inwards. I am not sure that it was necessary to mention this, but I have known the peculiar action of these bodies referred to as militating against the uniformity of the action of the urethra referred to, while in fact they do but illustrate its existence. If the urethra submitted tranquilly to the intrusion, and made no expulsive effort at all, the foreign bodies would not travel; as it is they must move, and can only do so in one direction. Of course it is due to this function of the urethra that gravel and small calculi are expelled in great number, and that the morbid excretions in gonorrhœa, &c., always issue externally, and never go backwards to the bladder.

The second point of importance in which the structural function of the urethra which I have described should affect our practice is associated with treatment of stricture of the urethra. I do but allude to this now, and shall reserve what I have to say on this head until a future lecture, when I shall enter fully on the subject.

FROM the Report on the Sanitary Measures in India in 1873–74 we learn that the general death-rate in the European army in India in 1873 was 15·3 per 1000, a lower rate by upwards of 2 per 1000 than any previously recorded. If deaths of invalids returned to Netley are added, the rate is 15·8 per 1000.

Introductory Lecture

TO THE WINTER COURSE OF

CLINICAL SURGERY.

Delivered at the Western Infirmary of Glasgow (University Clinic),

BY GEORGE H. B. MACLEOD,

REGIUS PROFESSOR OF SURGERY, SURGEON AND LECTURER ON CLINICAL SURGERY IN THE INFIRMARY.

GENTLEMEN,—It is desirable that at the outset of our clinical work I should explain to you the nature of the study we are going to engage in, and the system of teaching it which I pursue. Within the University I have already made known to you the aim and scope of my course of instruction in systematic surgery, and now here, in our practical school, I desire to point out what further duty devolves upon me as your teacher. As Professor of Surgery in this school, my business divides itself into two parts. These are not distinct or independent, but, on the contrary, form one whole, and that consists in a complete course on the science and art of surgery. One half of my function I perform within the University, and the other half here in the hospital. No systematic course can be complete without its practical part in the clinical school, no more than systematic anatomy or chemistry can be efficient without dissecting room and laboratory. On the other hand, no bedside instruction can avail without preliminary education in the class-room. I am desirous of placing thus clearly before you this entire affinity and relationship between what is termed the theoretical and practical departments of my subject, as attempts are occasionally made to dissever them, and even to exalt the one at the expense of the other. That of late years a strong disposition should have manifested itself to depreciate "lectures" and all mere oral teaching, and to commend "practical" instruction, need not astonish us when we remember how terribly lecturing was abused in days not long past. It appears to us now almost incredible that anatomy, chemistry, and botany should at one time have been taught without practical illustrations, but there is no doubt they were so. It must be borne in mind, however, that such practical instruction in surgery as can be given here is only capable of supplying you with a certain amount of that learning which you require. It alone cannot possibly equip you for the exercise of the surgical art. You cannot do without it, yet you cannot do everything by it. It is requisite that you be first instructed in the principles on which the practice seen here is founded. You must be made conversant with the terms used at the bedside. You must know in some measure the nosology and pathology of the diseases brought before you, as well as the usual influence exercised by those conditions which are special to the patient, and the effects which are produced by remedies. Systematic surgery is, after all, the sum of clinical experience. Such a course is made up of the conclusions or generalisations drawn from a multitude of bedside observations reduced to order and systematised. Clinical surgery can thus never wholly take the place of systematic, but must ever be auxiliary and subsidiary to it. The two branches must be entwined, and then they will mutually support and illustrate one another. If you have been well instructed in principles you will come half taught to the bedside, and be capable of profiting by what you there see. To learn practical surgery, however, is not easy, and will demand all your attention. Give it as much time as you can. It is by it that you must come to fulfil the chief end of your professional career, the alleviation of suffering and the saving of human life.

Clinical study, then, aims at applying the rules and doctrines of the class-room to actual cases of disease. In the hospital we see the living illustrations of those affections which we have heard or read of, and in many cases we are able to compare the relationship which exists between certain signs seen during life and the state of textures and organs after death. It is in clinical research, properly con-

ducted, that we gain that accuracy in the employment of the special senses which is so desirable, and learn to exercise the judging and reasoning faculties in sifting evidence and separating what is accidental and immaterial from the essential and important in those facts or signs which are presented to our observation. Careful attention, patience and diligence, truth and candour in observing and applying facts to theories, accuracy in generalising or deducing principles, these are qualifications which are requisite in a true clinical student.

In this school, as in most others, clinical instruction is conveyed both by lectures and bedside teaching. Once a week a more formal lecture is given by each medical attendant, and on several days you receive instruction in the wards. Both these methods are advantageous when combined. In some schools the bedside work is neglected, and the lecture becomes the main or sole means of teaching, while in other hospitals the reverse is the case, and ward lessons are alone employed. The traditions and usages of the school, or the means and time at the disposal of the teacher, appear in many cases to determine the choice. I do not think that in many schools this practical work has been so zealously cultivated as it has been for some years here. You will soon find how strictly attendance is enforced. At five minutes past nine in the morning, whether it be at lecture or in the ward, the roll will be called, and every absentee must give a satisfactory account of himself. I shall endeavour this session, as in the past, to be at my post every morning to a moment, and to allow no private engagement to interfere with this important duty, and I shall expect from you like diligence and punctuality. I want no sluggards here, and none who, by careless attention, disturb the application of others. Every man of you must act as dresser, either now or in summer. I will give every facility for a long continuance of that service. It is as a dresser that you will come to have a true interest in the patients, to observe their cases with care, and feel some part of the difficulties and responsibilities of the work.

After studying the various plans of clinical teaching followed in other schools at home and abroad, the method I have been led to adopt is this. On Monday, my friend Dr. Knox (one of our assistant-surgeons, and able demonstrator) will give you in the side ward minute instruction in bandaging, dressing, and the application of surgical apparatus. This duty I used myself to perform, but I am glad to have it taken up by younger and abler hands. What is there shown you will individually have to repeat before your instructor, and afterwards in my presence, in the fulfilment of your duty as dressers. All dressings of any consequence, as well as apparatus for fractures &c., are applied either by you or in your presence by myself or my house-surgeon. It is quite impossible that any accident can prevent, as too often happened in my own time, a student who attends the wards regularly from seeing all the usual fractures and dislocations frequently dealt with in all their details. On Tuesday I meet you in the theatre and "lecture." By this I mean that I then dwell upon the lessons derivable from a series of cases of the same affection which either at the moment are or quite recently have been under treatment before you; or a wider and more general view than can be taken by the bedside is given of some of those accidents or diseases we have been studying,—a view checked and regulated, however, at every point by the example of it we have been dealing with. At other times the causes, nature, and results of an operation recently performed, or some more general affection affecting the sick under our care, are taken up. Cases of the same disease in different wards are, as it were, collated and compared, and what practical lessons they teach enforced. In this part of the work pathological specimens and drawings are occasionally employed; yet it is most desirable, even in these more formal meetings, to avoid controversial and critical discussion as much as possible. On Wednesday, Thursday, and Saturday we meet in the ward. Friday being the lecture day of my colleague, you are excused attending with me (as his students are on Tuesday), in order that you may be present at his "lecture."

My ward work is thus conducted. We have a side room, well heated and lighted, fitted up with seats and a bed, into which all those patients who can be moved are brought on a light, noiseless, easily-wheeled couch. If a patient cannot leave his bed, then we visit him in the ordinary way; but I much prefer having patients taken into the side room, because they can be there seen and examined with more care and attention. Every student, being seated, can give his full attention to what is doing, and can take notes accurately and comfortably. The patient is placed on the bed in the full view of all, and his ailments are systematically inquired into. You will observe that I put each question in a loud voice, and that I repeat the reply, so that you can all follow what is doing. After a little initiatory practice, you will each be called upon to take my part and examine the patient. I shall in any case try to show you how best to obtain and apply information; and I shall, by examining you on what you see and hear, know whether your comprehension follows the work performed. Explanations can be given regarding each case both before the patient enters and after he leaves. All remarks which it is undesirable that he or his fellows should hear can thus be freely given utterance to, and so all fear of wounding his feelings avoided. The harm, too, which so frequently is done to weak and nervous patients by the rush of an eager crowd into the ward is prevented, and thus the interests of both patients and students are promoted. The lesser operations I also perform at these meetings; and as you are close to the patient, and each step is explained, you will, I think, get more good from them than is usually attainable. Great and dangerous operations unfortunately require not unfrequently to be undertaken, but these you will see performed in the theatre on Saturday. In this hospital I hope you will not find any of that ill-placed sensationalism regarding operations which, to the great detriment of students and the profession, is too often indulged in. Our aim should always be, to diminish the number and lessen the risk of those operations which mark surgical practice.

The cases we shall chiefly deal with in our ward work are the common and every-day surgical ailments, not the rare and curious, which seldom occur in actual practice. The more usual an ailment or accident, the more claim it will have upon our attention. Each morning we will only take up a very few cases, and these typical and well-marked examples of their kind. The great point will be to secure a clear comprehension of a few ailments at a time, and the principles deducible from them. All risk of such confusion as would arise from dealing with too many, and, above all, unrelated cases, must be avoided. Here we have always abundant material from the large and busy city around us. I shall try to be as simple and elementary as possible in conveying information, remembering that the receptivity of first-year's hospital students cannot be great; and I shall also aim at rendering the whole teaching as conformable as possible to a system, so that by the end of the session we may have compassed a fair summary of surgical practice. We must so group our cases as to make them afford the greatest amount of instruction, and at the same time secure order in our work. To accomplish this effectually, two things are provided. I have put into your hands a short guide to case-taking, in which you will find an outline of the chief points to be observed, both as regards cases in general and special ailments. By following this a uniform system will be attained. The other acquirement to orderly procedure is that I keep a daily register of what we do in the wards, so that an easy control is maintained, and, in a great measure, a definite arrangement followed out. I shall expect every dresser to have an intimate acquaintance with his cases, and occasionally I shall ask for written reports from him, besides questioning him at the bedside. Rewards (medals and certificates) are given for diligence and proficiency, and the house-surgeonships are bestowed (if the applicants are otherwise eligible) on those who attain the highest place in this department.

But, besides the junior class, to whose studies I have been hitherto referring, I have been induced by the spontaneous request of the senior men (those who have passed on to the medical side of the hospital) to meet them once a week for clinical purposes; and I would here for a moment speak of that class, as it is a voluntary one, and beyond doubt the most useful I have ever conducted. This is the third year of its existence, and this session it contains the great majority of the most advanced students. The hour of meeting is after the usual visits on Thursday, and for their instruction I chiefly employ the out-door patients who come to my ward for advice. In the side room we hold our conferences, which are as nearly as possible the same as they would be in private practice. Each student in turn examines

a case, and gives an account of everything connected with its anatomy, physiology, pathology, and surgery. Not only do they in this way get their knowledge corrected, but they discover what subjects they are ignorant of, and so are led to supply the deficiency. The utmost frankness of communication is cultivated. These students have also, at my suggestion, organised themselves into a society, which meets on Saturday. Two examiners from their own numbers are appointed for the subsequent meeting, whose duty it is to prepare themselves thoroughly on some medical subject which has been within the range of their study, and for half an hour each presides and examines the rest. Of course he does not let the subject he is going to take up be known beforehand, and his authority for the time is strenuously maintained.

Now, gentlemen, in all this I have frankly laid before you the plan of clinical teaching I pursue, but it will prove fruitless unless it receives your most cordial support. The knowledge you seek must be conquered by yourselves. All I can do is to point the way as best I can, and try to awaken your observing faculties and lead you to reflect. I cannot give you perseverance and attention, but I can and will give you an example of industry and punctual attention to my duty. It is essential to your advancement that you keep yourselves abreast of the cases. You may visit the wards freely during the morning; and the ward journal, in which all changes in the condition of the patients are noted, is open for your inspection; and I shall at each visit tell you carefully of everything which has occurred during the interval since our last meeting. Everything done is open to your most minute inspection. Every error or oversight made you have the amplest means of discovering, and I promise you that they will be frankly admitted and discussed. Candid criticism is the best security against the repetition of mistakes, and gives a guarantee for future improvement.

To get the utmost good from your hospital work, you should read up at home on the different diseases examples of which have been shown you in the morning; and to facilitate this I will at the end of each day's demonstration mention to you the subjects you should thus seek further information on.

It is no use to begin all this work which I have outlined to you with spirit, and let the effort soon die out. The early enthusiasm must be sustained. Steady perseverance is far better than spasmodic application. The sooner students begin to get accustomed to hospital work the better, and the longer they keep to it the more they will like it. I have always regretted that foolish craving for "settling down" in practice which seizes so many of our men after they have graduated. It is just then, when they are free from the phantoms of examinations, that hospital attendance becomes really valuable; and a year of quiet study at that time, in such an institution as this, would, as a mere commercial venture, repay them well, putting out of account the incalculable satisfaction it would prove in after years.

Every morning, I may add, I shall remain fully two hours with you, and nothing will afford me more pleasure than to answer any questions you have to put, or to assist you in any difficulty. My staff of assistants is more than usually numerous, and on their aid you can always rely.

In what time remains to me, I propose to give you a brief outline of the history of clinical surgery, and explain to you the present position of the teaching in this school.

As might be expected, very little is known of the early history of clinical teaching. It is generally said Hippocrates took his pupils to the bedside for instruction; and his careful annotations of disease at least prove him to have been a careful clinical observer. In the Alexandrian school Herophilus and Erasistratus get the credit of having given bedside lessons; but nearly all trace of such teaching is lost from that early time down to the end of the sixteenth century. True, it is said that Thessalus and Symnachus during the first century, and the teachers in the school of Salernum in the twelfth century, attempted such instruction; but our knowledge of its exact nature is too slight to enable us to form any opinion concerning it. For a brief period at the end of the sixteenth century clinical teaching was pursued at Padua and Pisa, but it was soon abandoned; but afterwards, in 1764, a Clinical Chair was established at the former school. In the sixteenth century Medicine was much oppressed by the authority of the ancients. The dogmas of the "Fathers" — Hippocrates, Galen, and Celsus,—held men's judgments in all-powerful fetters till the awakening which followed the Reformation, and the discovery of printing stimulated medical like all other knowledge. Anatomy was in a great measure born, and her eldest child—Surgery—grew to a certain degree of vigour, mainly through the guidance of Ambrose Paré (a pupil of Fallopius), who had the courage to think for himself, and to add his own observations and reflections to the traditional teaching of the schools. He, though, like most of his distinguished contemporaries and successors, a "barber-surgeon," gave surgery somewhat of a scientific position. He established a school of surgical practice which for a hundred years governed France, and, in fact, Europe. The seventeenth century marks the division between ancient and modern practice; and, under the influence of the philosophy of Bacon and Descartes, men's minds began to open, and the all-powerful effect of authority was abolished. Harvey and a host of able anatomists in all countries by their discoveries greatly advanced medical science, while Leeuwenhoek opened up the vast field of minute anatomy by the application of the microscope to histological purposes.

In the middle of the seventeenth century Boerhaave (a pupil of Pitcairn, of Edinburgh) taught clinically and with great *eclât* at Leyden; and to Dr. John Rutherford and De Haen, his pupils, the Edinburgh and Vienna schools owe the introduction of the teaching of practical medicine. In 1754 the celebrated Van Swieten was ordered by Maria Theresa to establish a clinical school at Vienna, and De Haen became the first professor. At the period I speak of it was in Italy and France that surgery chiefly progressed; but Wiseman in England, and Purmann in Germany, gathered, in the bloody tumults of the time, many important surgical axioms.

The Royal Academy of Surgery, founded by Louis XIV., gave a great impetus to surgery; and in the Institution of the Garden of Plants, Dionis found a field for his great talents. He began clinical teaching in France; and after him Saviard, Mareschal, and others pursued it at the Hôtel Dieu. The College of Saint-Côme and the Royal Academy of Surgery gave a life—though often a very stormy one—to surgical discussion and research. Ledran, Louis, Garengeot, and, before all others, J. L. Petit, gave a prominence to French surgery at the beginning of the eighteenth century, which was increased and extended by their successors Desault, Sebatier, Chopart, Anel, Pouteau; and after them in succession Bichât, Dupuytren, Boyer, Roux, and Nélaton, all of whom have been the chief surgical teachers of Europe. It is, perhaps, Desault's chief glory that he established permanently clinical teaching in Paris (in 1750), and to his clinic Chopart, Bichât, Dupuytren, and Boyer in succession followed.

The Edinburgh Infirmary was established in 1736, and in 1748 Rutherford was busy teaching clinical medicine. I have seen it stated that before that date Monro had undertaken clinical surgery, but I have been unable to verify this. Rutherford tells us his plan was—(1) to give a history of the disease in general; (2) then to inquire into its cause; (3) next to give his prognosis; and (4) lastly to lay down indications for cure. In the hands of Cullen (who succeeded Rutherford), and afterwards from Gregory and Alison, clinical medicine in Edinburgh secured a high reputation; while at the end of last century Mr. Russell was appointed Professor of Clinical Surgery, though the anomalous position in which he was placed as regards hospital wards made it impossible for him to succeed. Mr. Russell had no patients assigned him for the illustration of his course, but, on obtaining the permission of the Professor of Anatomy and Surgery (then conjoined), he was allowed to comment upon the cases under the treatment of his colleagues; but he could at any time be debarred by them from access to the wards. When anatomy and surgery were disjoined, the right to teach clinically was by an error attached to the former chair, and thus an opportunity was afforded for the establishment on a truer basis of that department of instruction which has been so ably developed by its more recent incumbents. The exclusive rights now attached to the clinical chair of surgery in Edinburgh have, as is well known, occasioned much heartburning in that school. Nowhere else are students compelled to attend the teaching of one professor. To get this arrangement abolished has been

strenuously but futilely tried by the Royal College of Surgeons. So long as the chair is filled by an eminent man, perhaps no harm is done; but such exclusive privileges might be productive of the greatest harm under other circumstances.

In 1782 Richter began at Göttengen the first of those admirable cliniques which have made many of the German schools famous; and now at nearly all the medical centres there exists a most elaborate system of bedside teaching.

In 1792 Sir Astley Cooper began to employ his hospital cases to illustrate his surgical lectures. The effect of this, he tells us, was most gratifying. While in 1791 his class only numbered seventy-three, the year he made this change it increased to one hundred, and the steady augmentation to four hundred and six in 1824 he ascribes to this clinical method of instruction. In 1792 some arrangements for teaching clinical medicine appear to have existed at the London Hospital. In 1813 Sir Benj. Brodie began to give regular bedside lessons.

In Dublin, wards were set aside for clinical purposes as early as 1785, and by degrees a practical school of great eminence arose; for while Crampton, Smyly, and Porter taught clinical surgery, Marsh, Corrigan, Graves, and Stokes brought practical medicine to great distinction.

In our own city clinical teaching appears to have existed as early as 1787, as a ticket for a course of "Lectures on the Cases of Patients in the Town's Hospital, Clyde-street, by Robert Cleghorn, M.D.," is in the possession of my colleague, Professor Cowan. The Royal Infirmary was established in 1793, and shortly afterwards bedside teaching was to some extent pursued, but it was not till 1829 that such instruction obtained a permanent or important place in the instruction of students. No proper or efficient system of teaching could be pursued by the general practitioners of that day, who were elected to serve in the hospital for two years at a time, and who were only in actual charge of patients for three months in each year. In later times, in the hands of Macfarlane, Lawrie, Andrew Buchanan, Moses Buchanan, Lyon, and Fleming, clinical surgery in Glasgow was more carefully cultivated. The teaching has always been quite open, and at no time has this been the case more than at present, when every surgeon in charge of wards in either hospital is placed, as regards the recognition of his teaching, on precisely the same footing, and students are at perfect liberty to choose any of them as their instructor. In order to fulfil the necessary course, each student attaches himself to two teachers, and he is compelled to divide his time between them, attending the "lecture" of both every week, but confining his visits to the wards of one for three months at a time. He has thus the opportunity, during the six months' session, of watching the practice of two men, and yet following to a termination the cases treated.

Before the clinical teaching was transferred from the Royal Infirmary, Professor Gairdner and myself were the only representatives of the University engaged in clinical teaching. When this institution was opened last year, two of our former associates as clinical teachers in the Royal Infirmary joined us here, and to them the University gave the well-earned status of professors. In this way Drs. McCall Anderson and George Buchanan were associated with Dr. Gairdner and myself in this very important and laborious work; but their appointment and official position as Professors of Clinical Medicine and Surgery has in no sense changed the relation in which Dr. Gairdner and myself stand to the teaching, nor has their appointment in any way narrowed or restricted the choice which you are allowed to make of your teachers. These appointments have brought augmented force to our school, but they have conferred no exclusive position on their holders such as was pointed out existed elsewhere.

The conditions favourable to the healthy development of clinical teaching have greatly improved of late years in our school. The division which now so markedly exists between medical and surgical practice, and the restriction to consultation work which several of the teachers have imposed on themselves, have allowed more time to be devoted to hospital duties, and has enabled them to concentrate their attention on special departments; and to this circumstance more than any other do I ascribe that increased vigour which has marked the teaching of later years, and the rapid increase of our school which has followed. The prolonged hospital appointments permit such improvements to be made in practical teaching as were before impossible, and to no event of my professional life do I look back with more satisfaction than the part I took in that reform. The almost complete severance which existed between the University and the hospital up to a few years ago was a total bar to the development of the clinical teaching.

Gentlemen, in closing these remarks I would only add that the duty demanded of us teachers is most anxious and responsible, whether viewed with reference to you or the patients. It is a very grave affair to be charged with the instruction of others in any matter; how infinitely more serious is it when the issues are so momentous and far-reaching as those embraced in medical education! We are entrusted with the practical education of men who go to all quarters of the earth wherever the British name has penetrated. Your knowledge and skill may affect the health and happiness of innumerable families, and any error you imbibe here may be multiplied in endless ways. Yet, on the other hand, all good and true lessons will have a wide circuit for their action, so that the clinical teacher is, as it were, the centre from which far-reaching waves of good and evil may spread. It is also a most anxious duty we have to perform, as we have, as it were, to think aloud before an intelligent audience, and to recognise disease, foreshadow results, and direct treatment almost on the spur of the moment. If this is most trying to a teacher's reputation, there is at least a compensating gain both to himself and his patients, as it must needs render him careful in his words and actions, and in this augmented attention and caution the patients secure a further guarantee for their prudent treatment. All of us, whatever our experience may be, are too likely to err and fail, but if each strenuously endeavours to do his best, he has a right to rely on the loyal support of every true student.

CASE OF NYSTAGMUS OCCURRING IN A COAL-MINER, ASSOCIATED WITH PALPITATION AND PROFUSE SWEATING.

By BYROM BRAMWELL, M.B.,
PHYSICIAN AND PATHOLOGIST TO THE NEWCASTLE-ON-TYNE INFIRMARY.

THOMAS L——, aged thirty-eight, a pitman, married, was admitted to the Newcastle-upon-Tyne Infirmary on the 10th of June, 1875, complaining of dimness of sight, palpitation, and debility.

Previous history. — He has worked as a coal-miner for twenty years, and has been particularly healthy. Has never had syphilis nor rheumatism. For the last four years he has suffered occasionally from palpitation. Eighteen months ago he first felt his sight dim, and noticed when he looked at an object intently that it seemed to move quickly backwards and forwards. The palpitation and dimness of sight have been worse since March, and since this date he has felt short of breath on exertion. He thinks the dimness of sight was brought on by the glare of the lamp which miners use. The pitmen, he says, often complain that the light hurts their eyes; he never, however, knew anyone affected in the same manner as himself.

The family history is unimportant.

Present condition. — He is a pale man, tolerably well nourished, but not muscular. The pupils are equal, contracted, and sensible to light. When he fixes the eyes on an object, the eyeballs oscillate quickly backwards and forwards with a slight rotatory movement. The oscillation is greatest when he looks upwards or to the right. It is also increased by looking at distant objects. It is not increased by a dim light, and is not worse when he assumes a stooping position. He states that the nystagmus is worse since he left off work. When at work he used to look chiefly downwards and to the left. On ophthalmoscopic examination the fundus is seen to be normal.

The thorax is well formed. On palpation a very marked systolic thrill is felt in the first and second left interspaces, just outside the sternum. The percussion note is impaired over the same area, the dulness being best marked between the second and third left costal cartilages. On ausculta-

tion a loud systolic murmur is audible over the area of thrill. Its point of maximum intensity is at the middle of the sternum, on a level with the third costal cartilage; from this point it is propagated upwards over the area of thrill to the left sterno-clavicular articulation. The murmur is unaccompanied by a second sound. At the second right costal cartilage and over the course of the aorta, the murmur is heard, but much less loudly. There is no venous hum in the neck. Pulsation and thrill can be faintly felt when the finger is placed deeply in the suprasternal notch. The murmur is just audible in the left suprascapular region. The radial pulse numbers 72; it is equal in the two wrists, full and regular. There are no pressure signs. Every three or four days, sometimes more frequently, the patient is attacked with violent palpitation; the attacks last from a few minutes to half an hour; they occur at all times of the day, and without any apparent cause. The slightest exertion causes profuse sweating. The sweating sometimes comes on when he is at rest, and always follows the attacks of palpitation. The appetite is fair; tongue clean. The temperature in the axilla is 97° F. The other systems and organs are normal. There is no enlargement of the thyroid.

Five minims of tincture of digitalis and ten minims of the tincture of the muriate of iron were ordered three times a day.

June 21st.—Since patient's admission it has been noted that the pupils are frequently unequal, the right being sometimes smaller, sometimes larger than the left. The sweating is sometimes confined to the left side of the face. The temperature on both sides is the same. His general condition is unchanged.

July 3rd.—An attack of palpitation came on to-day in my presence. It commenced at 12.30. The eyes became slightly prominent; the pupils considerably dilated; the cardiac pulsations numbered 144 in the minute. The face was slightly livid; the extremities cold. The patient stated that the attack was a very slight one. At 12.35 he said he would try and "put it away." He took two deep breaths and said, "It is away." At the same moment the pulse fell from 150 to 60 in the minute. Slight pain over the front of the chest was complained of while the palpitation lasted. The patient says when it goes away he feels the heart give a sudden jump, and the pulsation immediately ceases. He can always "put it away" by taking one or more deep inspirations. Sometimes the attack continues for half an hour before it is stopped. The digitalis and iron to be discontinued. To take two minims of liquor arsenicalis thrice a day.

15th.—Was made an out-patient to-day as he had to go home to attend upon his wife who is ill. The liquor arsenicalis has produced no effect, although the dose has been increased. To discontinue it, and to take half a drachm of the liquor ergoti instead.

Aug. 26th.—Was readmitted, as he has been much worse of late. The palpitation and sweating have been most intense; the oscillation of the eyeballs is less; he can now look steadily forwards, downwards, and to the left; when he looks upwards, or to the right, it always commences; when the eyes are at rest, vision is good; his physical condition is otherwise the same. To take one-eightieth of a grain of sulphate of atropia three times a day, and twenty grains of bromide of potassium every six hours.

Sept. 10th.—A violent attack of palpitation came on at 11.10 to-day; the cardiac pulsations numbered 174; the murmur was inaudible, its place being taken by a short rapid pulsation; the radial pulse was small and thready; the extremities cold; the eyes were prominent and staring, the pupils dilated; the respirations numbered 28. He made several attempts to "put it away," but did not succeed till 11.20. He then said "It is away." The pulse at the same moment became full and steady (72 in the minute); the murmur at the same time became loudly audible; no irregularity nor intermittency was observed before the fall. To take half a drachm of the bromide three times a day.

25th.—Says he feels a good deal better; the attacks of palpitation are less frequent and less severe; he has gained four pounds in weight since his readmission; he feels weak and shaky about the legs, but otherwise well; the sweatings are much less profuse. To inhale nitrite of amyl during the paroxysms.

Oct. 1st.—The patient went out to-day greatly improved. The nitrite of amyl completely controls the paroxysms. He said on his discharge, "I wish I had had that medicine sooner."

Remarks.—In THE LANCET of June 12th, Dr. C. Bell Taylor, of Nottingham, reported several cases of nystagmus occurring in coal-miners, and stated his belief that the oscillation of the eyeballs was in these cases a sort of chorea, brought on by strained efforts of vision in an imperfect light. This case agrees with those reported by Dr. Taylor, in so far as the patient is a miner and that he suffers from nystagmus. It differs, however, in the following essential points:—1st. The nystagmus is associated with other symptoms—viz., palpitation, loud systolic murmur, and profuse sweatings. 2nd. The oscillation of the eyeballs is not increased by an imperfect light, nor when the patient stoops. 3rd. It is worse when he looks at distant objects, and when he looks upwards or to the right. 4th. It is not easily curable; for it still continues, although he has been off work for seven months.

We know so little as to the cause of nystagmus that it is impossible to say whether the oscillation of the eyeballs, the palpitation, and the other symptoms of this case were associated as a mere coincidence or not. I am inclined to think their relation was not merely accidental.

In some particulars the case resembles exophthalmic goitre—a disease in which there is good reason for believing the cervical sympathetic to be at fault. Certain facts in this case point in the same direction, and show that the palpitation was due to stimulation of the accelerators of the heart, and not to suspension of the inhibitory functions of the vagus. These facts are—1st. The variable state of the pupils, the right being sometimes larger sometimes smaller than the left. 2nd. The profuse sweatings, sometimes unilateral. 3rd. The condition of the patient during the attacks of palpitation—notably the prominence of the eyeballs, dilatation of the pupil, and coldness of the extremities. 4th. The marked benefit which resulted from the use of nitrite of amyl—a drug which acts by dilating the vascular system.

It is a remarkable fact that the patient was able to "put away the beating" by taking a few deep breaths. This was no doubt due to reflex stimulation of the vagus. Here again is another fact in support of the theory that the palpitation was due to stimulation of the accelerators, for it is unlikely that the vagus would be so readily aroused if its inhibitory functions were suspended.

The instantaneous manner in which the attacks of palpitation ceased is worthy of note. The pulse, from being 174, thready, and almost imperceptible, became *all at once* full, regular, and of normal frequency. There was no stoppage for several beats, no irregularity before the fall took place—facts which were observed by Dr. Farquharson in his lately published "Case of unusually Rapid Action of the Heart."

The characters of the murmur were peculiar. At first I was of opinion that it was hæmic, and in the pulmonary artery. Against this view were the dulness on percussion, the very marked character of the thrill, and the absence of venous hum. I am now inclined to think that the murmur was due either to organic disease of the pulmonary artery or more probably to some congenital malformation.

CLINICAL ESSAYS.

BY T. PRIDGIN TEALE, M.A., F.R.C.S.,
SURGEON TO THE GENERAL INFIRMARY AT LEEDS.

No. VI.—ON THE TREATMENT OF VESICAL IRRITABILITY AND INCONTINENCE OF URINE IN THE FEMALE BY DILATATION OF THE NECK OF THE BLADDER.*

THE discussion at the late meeting of the British Medical Association at Edinburgh on Dr. Duncan's paper "On the Examination of the Female Bladder by Dilatation," and his testimony to the benefit resulting from the proceeding, and the extract from the *New York Medical Record*, Aug. 14th, 1875, "On the Cure of Cystitis by Dilatation of the Neck of the Bladder,"—warn me that it is time that I brought before the profession the observations I have made on the

* Read before the West Riding Medico-Chirurgical Society at Leeds, February, 1873.

subject of this essay during the last eight years. The substance of the essay was read before the Leeds Medical Club in November, 1870, before the West Riding Medico-Chirurgical Society at Leeds in February, 1873, and before the Yorkshire Branch of the British Medical Association at a meeting at Scarborough in November, 1874.

About eight years ago the following case, of which unfortunately I cannot find any record, was under my care at the Leeds Infirmary:—A healthy-looking middle-aged woman had been for some time under treatment for great irritation of the bladder, accompanied with the passage of mucus tinged with blood. Having failed to relieve her by the usual means, I decided to dilate the urethra in order that I might introduce the forefinger into the bladder, and search for some explanation of the pain and bloody discharge, such as an ulcer or villous growth. No definite lesion was discovered; but, to my surprise, in the course of a few days, I found that she was completely relieved. She left the hospital, and I have not heard of her since.

This case struck me forcibly as parallel with the immediate relief which generally follows forcible dilatation of the anus for fissure and spasm of the sphincter; and I determined to profit by the hint. The result is, that during the last eight years the operation of dilating the neck of the female bladder as a means of cure of a distressing and unmanageable malady has been adopted in thirty or forty cases by myself and my friends.

In bringing the subject forwards I am met by three difficulties: the first, that I am proposing to treat *a symptom*, "irritability of the bladder," associated with a great variety of causes, and that, in applying a remedial operation, but little cognisance is taken of the cause of the symptom; the second is a consequence of the first, that the operation does not succeed in every case, and sometimes fails entirely; the third difficulty is this, that I have not yet been able to establish any rule to guide us to the selection of the exact cases to which the operation is suitable. My justification, however, for proposing the operation in the face of such difficulties lies in the fact that it deals with cases which defy all other known methods of relief, which cause intense, prolonged, and often permanent suffering to the patient, and constant disappointment to the medical attendant, and that in a fair proportion of the cases, *perhaps in one third*, absolute cure has been obtained, not in my hands alone, but in the hands of many of my medical brethren who have adopted the operation. It is a sense of these difficulties, the not infrequent failure of the operation, and my own inability to define exactly the cases in which success is probable, which has made me hesitate hitherto to bring the subject before the profession.

A.—Cases in which the Operation may be performed.

The *cases* calling for the operation are those in which there has existed for some months pain at the neck of the bladder and too great frequency of micturition, with or without pus, mucus, or blood in the urine; or incontinence of urine, with a full bladder unable to empty itself completely, or with a nearly empty bladder which is intolerant of the presence of urine. The *time* for doing the operation is when all ordinary means of relief have been tried in vain, whether general or specially directed to the bladder, uterus, rectum, or kidney.

This definition may be said to embrace a very wide range of disorders, having in common the one symptom—irritability of the neck of the bladder. The fact is, the operation has been tried and has succeeded in a great variety of cases. In some successful ones there have been pain and excessive frequency of micturition, giving rise to a suspicion of stone in the bladder, with urine perfectly healthy, and in which, at the time of the operation, the finger failed to detect any fault in the mucous lining of the bladder. In other cases the urine has contained altered pus and mucus and blood, such as is usual where there is vesical calculus, and yet the operation has cured. In others, again, there has been an abundance of unaltered pus, settling in large quantities to the bottom of the vessel, which was afterwards proved to have been derived from a suppurating kidney or other extravesical source; and even in these the operation has given substantial though perhaps temporary relief. More than one case has proved this fact—*that pus from a source external to the bladder may give rise to distressing irritability of the bladder, with pain and excessive frequency of micturition, the bladder itself being apparently sound*; and that the vesical irritability may be cured—for a time, at any rate—by dilatation of the neck of the bladder, although the original cause of the irritability remains in force.

Vesical incontinence.—In two cases (Mr. Scattergood's and Mr. Horsfall's) a perfect cure, and in one of my own cases very great mitigation, of vesical incontinence has resulted from dilatation. In these cases I suspect that there is an over-sensitive state of the mucous membrane at the neck of the bladder, which, the moment an attempt is made to empty the bladder, sets up spasm of the vesical sphincter, and arrests the act of micturition after the escape of a very small quantity of urine, the bladder remaining nearly full and ready in a very few minutes to induce another painful and equally ineffectual attempt at micturition. Thus an overflow of a bladder disabled from correct micturition by irritability of its sphincter becomes an incontinence. Thus also the operation I have proposed by rendering the irritable sphincter vesicæ powerless for spasm, perhaps temporarily incompetent, allows the bladder to empty itself completely, and the cervical mucous membrane to recover its tone.

B.—Operation.

The patient being under the influence of an anæsthetic, Weiss's dilator is introduced into the urethra and dilatation continued until the urethra is distended so as to admit two fingers. The dilator ought to be passed as far into the bladder as possible, otherwise the branches of the instrument yield too much to the resisting neck of the bladder. It is desirable to dilate slowly, so as to avoid, *as far as possible*, laceration of the mucous membrane of the urethra. In many cases this laceration occurs, although due care has been taken, and much more after-pain results in consequence during the first day or two.

Sometimes instead of Weiss's dilator I have used the conical probe-gorget, designed by my father for median lithotomy, as a guide for the finger, by which the remainder of the dilatation is effected. On the withdrawal of the dilator it is generally found that the urethra still grasps the finger. The dilatation thus attained enables the surgeon to explore the interior of the bladder. Generally the bladder has appeared to be perfectly healthy, being soft and velvety to the touch throughout. Occasionally portions have been raised and indurated, as if ulcerated, but I have thought this sensation might be deceptive, and produced by the corrugations of an empty bladder. I cannot say that I have undoubtedly detected ulceration by the finger in any of these cases. In two or three instances it has turned out that the bladder was permanently contracted to a cavity little larger than a thimble.

C.—Objections to the Operation.

(1) *Fatality.*—In three instances death has occurred within a short time of the operation. The first was a patient of my own and of Mr. Hodgson Wright of Halifax, who was excessively worn down by the sufferings of several years. The operation gave her much relief from pain, and was a great comfort to her, but her failure of health was progressive, and she died in about five weeks. At the autopsy it was discovered that the bladder was healthy, but that the pus in the urine came from the kidney. The second, a case of Mr. Wheelhouse's, was a child about four years of age, who had been relieved a year before by this operation, Mr. Wheelhouse having introduced the finger into the bladder for the purpose of exploration, and having thereby arrested the symptoms from which the child was suffering. A year later the child returned to the hospital with a relapse of the vesical symptoms. The operation was repeated, this time as a means of cure, not of diagnosis, and the child died in a day or two. At the post-mortem it was found that the bladder was healthy, and that the pus causing the symptoms came from a diseased kidney. The third fatal case was under Mr. Jessop. A young woman, worn down by vesical trouble and incontinence of urine that had existed since childhood, was submitted to the operation. The introduction of the finger found the bladder contracted to the size of a large thimble. She died in the course of a few days, and at the post-mortem strumous degeneration and suppuration of the kidney was found. I think I have heard of another fatal case, but I am not certain.

It may be said that these fatalities are an argument against the operation. To me they seem to be the reverse—

a reason why cases of this class ought not to be allowed to drift year after year into this broken-down condition, in which a comparatively trivial operation can extinguish the feebly sustained vitality. It rather raises the question suggested by Mr. Charles Smith, of Halifax, whether the disease of the kidney may not have been induced by the prolonged vesical irritation.

(2) Another objection may appear in the possibility that *the source of the irritation may not be in the bladder itself*, but may be pus entering the bladder from the kidney or some other extraneous source. The fatal cases of my own, and of Mr. Wheelhouse, already referred to, prove that the discomforts of the irritability of the neck of the bladder may be suspended or relieved by the operation, although the irritability may have originated in a cause external to the bladder.

(3) A third objection may be raised in the *danger of producing incontinence of urine*. My first idea about the operation was, that by producing *temporary incontinence of urine* we might so set at rest the vesical structures that any ulcerated or abraded surface might heal, that morbidly irritable or hypertrophied sphincter-fibres might lose their excessive irritability, and that any unhealthy condition of urine resulting from an imperfectly emptied bladder (as occurs in the male from enlarged prostate) might, by its freedom of escape, regain its normal character. This was my original idea—namely, to produced incontinence. And I was induced to believe that any incontinence would be temporary by what I had seen of the removal of large-sized calculi in the female with rapid recovery of vesical competency. It has happened, however, that the operation was rarely followed by any incontinence of urine, and many of the most rapid and most complete cases had not even temporary incontinence. On the contrary, instead of relieving the bladder every few minutes or every hour, they were able to retain their urine the greater part of the night immediately following the operation. Other cases, again, had incontinence of urine for a few weeks. One case for a few months had very little power of retaining urine and then recovered completely, the pain and irritability having been relieved from the first. Two cases that I know of have suffered from permanent incontinence of urine. It does not, however, appear that the liability to permanent incontinence depended upon the degree to which the dilatation was carried.

(4) *Relapses.*—In Mr. Wheelhouse's case the cause of relapse—suppuration of the kidney—was revealed by the post-mortem. In one of my own cases the operation of dilatation had been performed by Dr. Bell, of Bradford, to the extent recommended in my paper read at Leeds, but without relief. A few months after Dr. Bell and I dilated again more freely to the extent that would admit three fingers. After some days of incontinence she recovered power over the bladder. From passing urine every ten minutes or a quarter of an hour with groans, she was able to relieve herself without pain, and though not cured, she is only disturbed five or six times each night. In two other cases the operation was repeated, and I believe both are comparatively well, having occasionally slight attacks of pain, with increased frequency in micturition. This, however, may be said, *that a relapse* or *the failure of a first operation ought not to deter us from giving a second trial.*

D.—LITERATURE.

I have failed hitherto to find any authors who have proposed this or any similar treatment for affections of the female bladder. The nearest approach to it is the proposal of Sir James Simpson (mentioned shortly after his death by Mr. Lawson Tait) to cure irritable ulcer of the bladder—in other words, severe vesical irritation—in the female, by establishing a temporary vesico-vaginal fistula. His object was to obtain, what I aimed at by dilatation—physiological rest for the distressed organ. In works on female diseases the treatment of this distressing condition is generally dismissed in a few words. From the article referred to at the beginning of this paper it is clear that the Americans are at work in the same direction, and the case quoted is a strong confirmation of the correctness of the principle of treatment here advocated.

No less a confirmation is the advocacy of Dr. Duncan of dilatation of the neck of the female bladder as a means of exploration, and the testimony of his patient to the indirect benefit derived from it. Further confirmation of this principle may be drawn from the fact that Mr. Syme treated somewhat similar cases in the male by incising the neck of the bladder as if for lithotomy, and from the rapidity with which the inflammation of the bladder produced by a calculus subsides under the free drainage established by lateral lithotomy.

(To be continued.)

CASE OF

CONGENITAL HARD CANCER OF THE LEG IN AN INFANT;

AMPUTATION DURING THE FOURTH MONTH; RECOVERY AND PERMANENT CURE.

BY KELBURNE KING, F.R.C.S.,

SURGEON TO THE HULL GENERAL INFIRMARY.

ON the 28th of March, 1871, I was consulted regarding a male infant about two months old under the follow circumstances. At its birth, on Jan. 31st, 1871, Dr. B Savile, who attended its mother in her confinement, ob a tumour on the outer side of the right ankle, ab size of a filbert. It was not painful, nor did it cause any inconvenience, but it gradually increase When I saw it it was about as large as a walnut, wi connected with the lower end of the fibula, from seemed to spring. The skin covering it was quite having no appearance of vascular excitement. The was gradually lost in the surrounding healthy parts, which it was not separated by any distinct boundary. its size and pressure the foot was forced inwards, and t tumour occupied to some extent the position of the foot. It was hard to the touch and adherent to the skin, which was incorporated in the firm fibrous mass of which the tumour seemed to consist. It was firmly fixed, and could not be detached from the surrounding parts. There was no feeling of softness or of elasticity; it was throughout firmer and harder than any natural tissue except cartilage and bone. The child was thin and delicate-looking.

Although hard cancer is exceedingly rare in infants—in a tolerably extensive surgical experience I have never seen it before,—I concluded from these physical signs that there was no doubt—firstly, of the malignant nature of the tumour; secondly, of the necessity of its removal; and thirdly, of the impracticability of removing it by itself so as to save the limb. Accordingly, but very reluctantly, I gave it as my opinion that no proceeding short of amputation of the leg would meet the circumstances of the case; and, as the child had an anæmic appearance, I did not press this extreme measure, and felt rather relieved to hear in a few days from Dr. Savile that the parents declined to submit their child to the chances of an operation.

In the first week of May I heard again from Dr. Savile that the child had passed safely through an attack of whooping-cough, that its health was improved, but that the tumour was becoming larger, and the parents were anxious to have something done for it. I saw it again on May 10th, and was much struck by the change in the child's appearance. He had grown much, was fat and well nourished. But the tumour had doubled in size; the skin over a portion of its surface had ulcerated within the last few days, and there was a discharge of serous fluid mixed with blood. Under these circumstances I had no hesitation in recommending immediate amputation.

With Dr. Savile's kind and able assistance the following operation was performed:—The knife was entered just over the head of the fibula, and a semilunar incision was made through the skin over the front of the leg. A similar incision was made on the posterior aspect, the knife was passed into the tibio-fibular articulation, so that the whole of the fibula was removed, and then the tibia was sawn across a little below its anterior spine. The popliteal artery was divided before its bifurcation, a ligature was placed upon this vessel and two small arteries, and the operation—performed under the influence of chloroform—was completed without the loss of one teaspoonful of blood.

Dr. Savile, who from that time took charge of the case, informed me that the sutures were all removed by the 19th of May; the ligatures came away on the 22nd, and the stump was almost healed on the 26th, at which date the child was in vigorous health.

I happened to be consulted the other day by a patient who lives close to this child's parents, and who told me that the boy has had no return of disease, but is a remarkably fine healthy little fellow, and hops about most actively on his one leg.

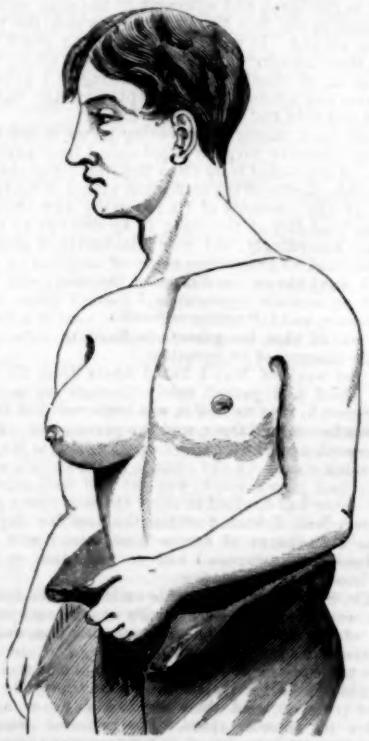
On microscopical examination the tumour was found to consist of a mass of caudate cells of rather small size and possessing but one nucleus. Histologists might refuse to call it by the name of cancer. But it was harder than any structure of the healthy body except bone and cartilage; it grew rapidly, encroaching on and displacing the normal parts; and it finally ulcerated and discharged bloody fluid. It possessed, therefore, all the usual physical signs of hard cancer of the most malignant kind, and would doubtless have soon led to the death of the patient.

Hull.

...E OF ABNORMAL DEVELOPMENT OF ...HE RIGHT BREAST IN A SEAMAN AT THE AGE OF PUBERTY.

DEPUTY INSPECTOR-GENERAL MORGAN, C.B.,
ROYAL NAVAL HOSPITAL, HONG-KONG.
...ated by the DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.)

...., aged twenty-one, ordinary seaman, was admitted ... the Royal Naval Hospital, Hong-Kong, on May 14th, ...5, with what was said to be a chronic enlargement of ...he right breast. On examination, the right mamma pre-



sented, in size and conformation, the appearance of the well-developed breast of a full-grown woman, lobulated, with an enlarged brown-coloured areola. The nipple, however, corresponded in size with that of the left breast. The man states that he first observed the right breast to be larger than the left about the age of sixteen and a half years. Since that time it gradually increased in size until it attained its present dimensions. There has been no kind of secretion from the nipple at any time. He has not experienced any pain or uneasiness in the breast except, when drilling aloft, it has come in contact with ropes, and necessitated his presenting himself as a candidate for the sick-list with a slight contusion. The genital organs are fully and well developed.

The accompanying drawing, for which I am indebted to Staff-surgeon Siccama, of H.M.S. *Modeste*, is a very accurate and faithful representation of the case.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

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UNIVERSITY COLLEGE HOSPITAL.

TWO CASES OF COMPOUND FRACTURE OF THE LOWER END OF THE HUMERUS.

(Under the care of Mr. CHRISTOPHER HEATH.)

THE following cases of serious injury to the elbow-joint are favourable for comparison, since the accidents occurred within a few hours of each other, and the patients lay side by side under precisely similar circumstances, and were treated in the same way, but with very different results. The first case appeared to be the more serious at first, both on account of the extent of injury and the age of the patient, yet he recovered without having any bad symptoms after the first few days. The second case ended in excision, from which the patient recovered. It is difficult to suppose that any better result could have followed the use of "antiseptic treatment" in the first case than occurred under the old-fashioned plan of applying a piece of lint dipped in blood; and the disorganisation of the joint in the second case seems to have been set up by a loose fragment of bone which no external treatment could have reached. The question of primary excision must necessarily arise in cases of injury to the elbow-joint, and where the amount of damage is great there can be little doubt of its advisability; but where the injury is confined, as in this case, to a single bone, with no positive proof of the joint being involved, most surgeons would agree in waiting for more precise indications before submitting the patient to a serious operation.

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On June 22nd, W. M——, aged fifty-two, was knocked down by a cab, the wheels of which passed over his right elbow. He was at once taken to the hospital. On examination, he was found to have a transverse fracture of the shaft of the humerus close to the lower end, and the lower fragment was evidently split, as the inner condyle could be moved apart from the outer, and this produced crepitus. There was a wound, about a quarter of an inch long, just above the inner condyle, leading down to the fracture, evidently produced by the projecting lower end of the shaft; from this there was a free escape of blood. The patient was at once admitted, and the arm was put upon an angular splint; a piece of lint dipped in the blood was applied over the wound, and an ice-bag was applied.

26th.—There is considerable swelling all round the elbow, with a good deal of tension; skin is marked with a slight red flush; not much pain in the part. From this date the redness, swelling, tension, and pain gradually decreased.

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a reason why cases of this class ought not to be allowed to drift year after year into this broken-down condition, in which a comparatively trivial operation can extinguish the feebly sustained vitality. It rather raises the question suggested by Mr. Charles Smith, of Halifax, whether the disease of the kidney may not have been induced by the prolonged vesical irritation.

(2) Another objection may appear in the possibility that *the source of the irritation may not be in the bladder itself*, but may be pus entering the bladder from the kidney or some other extraneous source. The fatal cases of my own, and of Mr. Wheelhouse, already referred to, prove that the discomforts of the irritability of the neck of the bladder may be suspended or relieved by the operation, although the irritability may have originated in a cause external to the bladder.

(3) A third objection may be raised in the *danger of producing incontinence of urine*. My first idea about the operation was, that by producing *temporary incontinence of urine* we might so set at rest the vesical structures that any ulcerated or abraded surface might heal, that morbidly irritable or hypertrophied sphincter-fibres might lose their excessive irritability, and that any unhealthy condition of urine resulting from an imperfectly emptied bladder (as occurs in the male from enlarged prostate) might, by its freedom of escape, regain its normal character. This was my original idea—namely, to produced incontinence. And I was induced to believe that any incontinence would be temporary by what I had seen of the removal of large-sized calculi in the female with rapid recovery of vesical competency. It has happened, however, that the operation was rarely followed by any incontinence of urine, and many of the most rapid and most complete cases had not even temporary incontinence. On the contrary, instead of relieving the bladder every few minutes or every hour, they were able to retain their urine the greater part of the night immediately following the operation. Other cases, again, had incontinence of urine for a few weeks. One case for a few months had very little power of retaining urine and then recovered completely, the pain and irritability having been relieved from the first. Two cases that I know of have suffered from permanent incontinence of urine. It does not, however, appear that the liability to permanent incontinence depended upon the degree to which the dilatation was carried.

(4) *Relapses.*—In Mr. Wheelhouse's case the cause of relapse—suppuration of the kidney—was revealed by the post-mortem. In one of my own cases the operation of dilatation had been performed by Dr. Bell, of Bradford, to the extent recommended in my paper read at Leeds, but without relief. A few months after Dr. Bell and I dilated again more freely to the extent that would admit three fingers. After some days of incontinence she recovered power over the bladder. From passing urine every ten minutes or a quarter of an hour with groans, she was able to relieve herself without pain, and though not cured, she is only disturbed five or six times each night. In two other cases the operation was repeated, and I believe both are comparatively well, having occasionally slight attacks of pain, with increased frequency in micturition. This, however, may be said, *that a relapse* or *the failure of a first operation ought not to deter us from giving a second trial.*

D.—LITERATURE.

I have failed hitherto to find any authors who have proposed this or any similar treatment for affections of the female bladder. The nearest approach to it is the proposal of Sir James Simpson (mentioned shortly after his death by Mr. Lawson Tait) to cure irritable ulcer of the bladder—in other words, severe vesical irritation—in the female, by establishing a temporary vesico-vaginal fistula. His object was to obtain, what I aimed at by dilatation—physiological rest for the distressed organ. In works on female diseases the treatment of this distressing condition is generally dismissed in a few words. From the article referred to at the beginning of this paper it is clear that the Americans are at work in the same direction, and the case quoted is a strong confirmation of the correctness of the principle of treatment here advocated.

No less a confirmation is the advocacy of Dr. Duncan of dilatation of the neck of the female bladder as a means of exploration, and the testimony of his patient to the indirect benefit derived from it. Further confirmation of this principle may be drawn from the fact that Mr. Syme treated somewhat similar cases in the male by incising the neck of the bladder as if for lithotomy, and from the rapidity with which the inflammation of the bladder produced by a calculus subsides under the free drainage established by lateral lithotomy.

(To be continued.)

CASE OF

CONGENITAL HARD CANCER OF THE LEG IN AN INFANT;

AMPUTATION DURING THE FOURTH MONTH; RECOVERY AND PERMANENT CURE.

BY KELBURNE KING, F.R.C.S.,

SURGEON TO THE HULL GENERAL INFIRMARY.

ON the 28th of March, 1871, I was consulted regarding a male infant about two months old under the following circumstances. At its birth, on Jan. 31st, 1871, Dr. Robert Savile, who attended its mother in her confinement, observed a tumour on the outer side of the right ankle, about the size of a filbert. It was not painful, nor did it seem to cause any inconvenience, but it gradually increased in size. When I saw it it was about as large as a walnut, was closely connected with the lower end of the fibula, from which it seemed to spring. The skin covering it was quite healthy, having no appearance of vascular excitement. The tumour was gradually lost in the surrounding healthy parts, from which it was not separated by any distinct boundary. By its size and pressure the foot was forced inwards, and the tumour occupied to some extent the position of the foot. It was hard to the touch and adherent to the skin, which was incorporated in the firm fibrous mass of which the tumour seemed to consist. It was firmly fixed, and could not be detached from the surrounding parts. There was no feeling of softness or of elasticity; it was throughout firmer and harder than any natural tissue except cartilage and bone. The child was thin and delicate-looking.

Although hard cancer is exceedingly rare in infants—in a tolerably extensive surgical experience I have never seen it before,—I concluded from these physical signs that there was no doubt—firstly, of the malignant nature of the tumour; secondly, of the necessity of its removal; and thirdly, of the impracticability of removing it by itself so as to save the limb. Accordingly, but very reluctantly, I gave it as my opinion that no proceeding short of amputation of the leg would meet the circumstances of the case; and, as the child had an anæmic appearance, I did not press this extreme measure, and felt rather relieved to hear in a few days from Dr. Savile that the parents declined to submit their child to the chances of an operation.

In the first week of May I heard again from Dr. Savile that the child had passed safely through an attack of whooping-cough, that its health was improved, but that the tumour was becoming larger, and the parents were anxious to have something done for it. I saw it again on May 10th, and was much struck by the change in the child's appearance. He had grown much, was fat and well nourished. But the tumour had doubled in size; the skin over a portion of its surface had ulcerated within the last few days, and there was a discharge of serous fluid mixed with blood. Under these circumstances I had no hesitation in recommending immediate amputation.

With Dr. Savile's kind and able assistance the following operation was performed:—The knife was entered just over the head of the fibula, and a semilunar incision was made through the skin over the front of the leg. A similar incision was made on the posterior aspect, the knife was passed into the tibio-fibular articulation, so that the whole of the fibula was removed, and then the tibia was sawn across a little below its anterior spine. The popliteal artery was divided before its bifurcation, a ligature was placed upon this vessel and two small arteries, and the operation—performed under the influence of chloroform—was completed without the loss of one teaspoonful of blood.

Dr. Savile, who from that time took charge of the case, informed me that the sutures were all removed by the 19th of May; the ligatures came away on the 22nd, and the stump was almost healed on the 26th, at which date the child was in vigorous health.

I happened to be consulted the other day by a patient who lives close to this child's parents, and who told me that the boy has had no return of disease, but is a remarkably fine healthy little fellow, and hops about most actively on his one leg.

On microscopical examination the tumour was found to consist of a mass of caudate cells of rather small size and possessing but one nucleus. Histologists might refuse to call it by the name of cancer. But it was harder than any structure of the healthy body except bone and cartilage; it grew rapidly, encroaching on and displacing the normal parts; and it finally ulcerated and discharged bloody fluid. It possessed, therefore, all the usual physical signs of hard cancer of the most malignant kind, and would doubtless have soon led to the death of the patient.

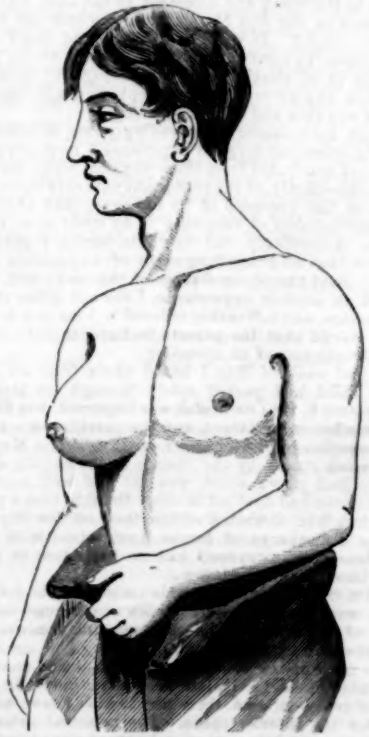
Hull.

CASE OF ABNORMAL DEVELOPMENT OF THE RIGHT BREAST IN A SEAMAN AT THE AGE OF PUBERTY.

By Deputy Inspector-General MORGAN, C.B.,
ROYAL NAVAL HOSPITAL, HONG-KONG.

(*Communicated by the* Director-General of the Medical Department of the Navy.)

A. B., aged twenty-one, ordinary seaman, was admitted into the Royal Naval Hospital, Hong-Kong, on May 14th, 1875, with what was said to be a chronic enlargement of the right breast. On examination, the right mamma presented, in size and conformation, the appearance of the well-developed breast of a full-grown woman, lobulated, with an enlarged brown-coloured areola. The nipple, however, corresponded in size with that of the left breast. The man states that he first observed the right breast to be larger than the left about the age of sixteen and a half years. Since that time it gradually increased in size until it attained its present dimensions. There has been no kind of secretion from the nipple at any time. He has not experienced any pain or uneasiness in the breast except, when drilling aloft, it has come in contact with ropes, and necessitated his presenting himself as a candidate for the sick-list with a slight contusion. The genital organs are fully and well developed.



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26th.—There is considerable swelling all round the elbow, with a good deal of tension; skin is marked with a slight red flush; not much pain in the part. From this date the redness, swelling, tension, and pain gradually decreased.

28th.—Swelling much less; no pain; suffers from constipation and flatulence, which are treated by the usual means.

30th.—Bowels have been freely open; there is a good deal of bruising all over the back of the elbow; he complains of a little rasping pain in the joint.

July 4th.—Splint changed to-day; a similar one put on. No redness or tension; very little swelling; the wound is now a superficial sore.

17th.—There is swelling and pain in the position of the left external iliac vein, and œdema of the leg and foot. Ordered to have the leg and foot slightly raised, and to take a saline mixture.

20th.—No pain in the groin; swelling and œdema much less.

24th.—Patient left the hospital to-day. It is noted that the wound has quite healed, that the bones have united, but no passive movement has been applied. He is to attend as an out-patient for this purpose. There is still slight œdema of left leg; no pain or swelling in the groin.

On June 23rd, J. A——, aged twenty-two, ostler, was riding on a horse, when he fell heavily on his right elbow. Finding he was severely injured, he came to the hospital, and was admitted at once. The humerus was found to be broken across at the lower end transversely, and the internal condyle was broken off. The forearm and lower fragment were displaced forwards. Over the lower end of the upper fragment was a wound an inch and a half long, through which the bone could be seen. The displacement was easily reduced by extension and manipulation. The patient appeared to be a fairly strong man, but of unsteady habits. The arm was placed on an angular splint, dry lint placed over the wound, and ice-bags applied.

24th.—Temperature 100·2°; pulse 88. Slept well; much less pain.

25th. — Temperature 100·6°; pulse 100. There is a good deal of swelling about the parts, and there is more pain in the joint.

29th. — There is considerable swelling and tension about the joint. On the surface are two or three blebs, which have become purulent. Temperature 100; pulse 88.

July 2nd. — There is great tension, redness, and pain up along the back of the arm; pus can be squeezed out of the wound from as far as four inches above the joint. Temperature 100·2°; pulse 96.

4th.—An incision about an inch long was made vertically up from the wound. About an ounce of pus came away. Dressed with an oakum poultice.

5th. — No bagging of pus, which is escaping freely; less redness.

16th. — Since the 5th inst. the temperature has ranged from 100° to 101°; the patient has evidently been losing ground. To day it is noted that he is pale, perspires much at night, his pulse is weak, tongue slightly furred, and appetite poor. There is very considerable swelling round the joint, both above and below; suppuration is free, and pus flows from the wound when pressure is made over the outer condyle. He was ordered sulphate of quinine and sulphuric acid, fish, and four ounces of wine.

20th. — Temperature 101°; pulse 106. The granulations at the wound form a fungus, which protrudes an inch above the surface. There is more discharge, and the swelling round the elbow has considerably increased the last two days. Fluctuation is distinct over the front and outer side of the joint.

21st.—This afternoon the patient was placed under the influence of nitrous oxide gas and ether, and, in Mr. Heath's absence, Mr. Erichsen proceeded to excise the elbow-joint by a longitudinal incision, about nine inches long, over the back of the limb. The humerus was first sawn off an inch and a half above the line of fracture, which was an inch above the condyles; but as the anterior part of the bone was bared of periosteum a little higher up, the healthy periosteum was stripped up and another three-quarters of an inch of bone removed. The broken ends of the bone were surrounded by pus, and pus was burrowing up the limb, and had extended all round the elbow-joint as well as inside. The articular cartilages were eroded. The ends of the radius and ulna were then removed in the usual way. The limb was put on an angular splint, and the edges of the wound brought together above and below, a drainage-tube being inserted in the middle. An oakum pad was applied over all. Extending down from the transverse fracture in the humerus was a vertical fissure running into the joint, and separating the two condyles; in addition a small fragment of bone was found lying loose in the cavity bathed in pus.

22nd.—Has passed a good night. Perspires much. Temperature 103°; pulse 124.

23rd.—Temperature 102·4°; pulse 120. The arm is more swollen; there is diffused redness all round the joint. There is some serous discharge from the drainage-tube. He sleeps better; sweats less; appetite good. Wound dressed with carbolic lotion. In the afternoon the sutures were removed, a fresh drainage-tube put in, and the part was irrigated.

24th.—Limb less swollen; redness decidedly less. Temperature 100·2°; pulse 112. Evidently improved.

30th.—The parts have healed except at two points, the original wound and where the drainage-tube is inserted.

August 1st.—Irrigation stopped. Dressed with red wash.

9th.—The general condition of the patient has wonderfully improved; the swelling of the arm has much subsided; there is almost no tenderness and no redness. The forearm is being gradually drawn up nearer to the arm.

17th.—Union is much firmer. Passive motion to be begun. Temperature 98·4°.

31st.—Swelling about joint much less. The muscles of the limb are wasted, especially the deltoid, and this allows the head of the humerus to drop slightly. The length of the arm cannot be accurately determined. There is very free motion between the arm and forearm, the bones of which appear to be about two inches apart. Patient has no power of movement at the elbow; he can move his wrist slightly, and also the thumb and two outer fingers; there is no movement in the ring and little fingers. Sensation is perfect except in little finger and inner side of next digit, where it is imperfect.

Sept. 2nd.—There is considerable swelling, induration, pain, and tenderness about the inner part of the arm. A poultice was ordered.

3rd.—As no relief has been afforded, Mr. Heath enlarged the upper of the two sinuses, and evacuated a quantity of pus, which greatly relieved the patient.

18th.—There are two very small, superficial, granulating, healing wounds over the back of the elbow. There is very free movement in the joint, but no voluntary power. He can now feel almost perfectly in the inner two digits, and can move them a little. The power of movement in the thumb is very free. If the fore and middle fingers are held he cannot move the two others at all. Discharged from the hospital to-day to Eastbourne.

The patient returned from the seaside at the end of a month with the incision of the operation perfectly healed, but with the sinus on the inner side still open. The motion in the elbow is very free; but the patient has as yet but little power in the limb, which is still somewhat swollen.

CASHEL UNION HOSPITAL.

SURGICAL CASES.

(Under the care of Mr. LAFFAN.)

We are indebted for the following notes to Mr. James O'Dwyer:—

Amputation of the Penis for Epithelioma.—In the following case amputation of the penis was performed after the method proposed by Mr. Tyrrell of Dublin, which is as follows:—Before amputating, a strong pin is inserted through the crura of the penis in front of the pubis, and the pin is allowed to remain in that position for several days afterwards. After the organ has been removed, the urethra is slit up for half an inch, and its mucous membrane is stitched to the skin. The advantages claimed for the operation are that it prevents retraction of the stump of the penis, and that it greatly lessens the difficulty of dealing with subsequent hæmorrhage; and, lastly, that there is no liability to consecutive urethral contraction.

T. M——, aged fifty-five, unmarried, a tailor by trade, was admitted on May 17th, 1875. The previous history was as follows:—He stated that he had enjoyed very good health up to September, 1874, when he noticed a little spot and hardness in the region of the glans penis. He also felt a pain in the arch of the foot. This pain, to use his own words, was accustomed to run up to the groin and out along the penis. He denied having had venereal disease, but admitted that he had not been of cleanly habits. He stated

he was not a drunkard. On admission, the glands in both inguinal regions were slightly enlarged. He passed a large quantity of water, and had frequent calls to micturate. The penis presented a very ugly appearance, being greatly enlarged, indurated, and ulcerated through in many parts. The case being clearly one of epithelioma in an advanced stage, removal was resolved on. On May 18th the patient was placed under ether, and amputation at the pubic arch was performed. Very little bleeding occurred in this case. The mucous membrane of the urethra and skin united in a few days. No stricture ensued, and he left hospital on June 28th following perfectly well, and continues so up to present date.

Necrosis of Circular Piece of Front of Tibia.—J. H——, aged thirty-two, married, a labourer, came to the hospital on July 20th, 1874, with disease of the leg. The disease, which occupied the diameter of about a crown-piece, and extended half an inch in depth, was caused by a blow of a stick whilst hurling. The man was strong and robust; but as the reparative processes had hitherto been all but stationary, and so much time would be required for the complete throwing off of the dead part, Mr. Laffan deemed it advisable to save time by operative interference (a point of very much consequence to a poor day labourer). He therefore resolved to gouge away the dead bone, which was accordingly done on the 30th August. Antiseptic dressings were employed. The situation of the necrosed bone did not admit of any covering of soft parts being provided from neighbouring tissues. It was interesting to observe how this want was supplied by the perfect coat of granulations thrown out by the cut surface of the bone. Another point of interest was the death of a small rim of periosteum, which was left around the margin of the bony cavity, and the shooting up of granulations by the underlying bone. The cavity left by the removal of the dead mass filled up after a few weeks in a complete manner; and the patient left the hospital well, and continues so up to the present time.

Spermatorrhœa.—Several cases of the above-named affection have presented themselves, and the same difficulties have been encountered in their treatment as have beset most practitioners in dealing with similar cases. The entire success which attended Trousseau's compressor in one of these cases makes it worthy of special mention.

J. R——, aged twenty-eight, a policeman, had suffered for six years from seminal emissions, which were brought on by the usual causes. He had been under treatment a long time, but without benefit. Mr. Laffan, under whose charge he then came, also tried for some weeks various remedies, but with a like unsatisfactory result. He then ordered a compressor, which was to be worn every night. This did its business so admirably that on no night on which it was worn did any discharge whatever occur.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the ordinary meeting of this Society, held on the 23rd inst., Sir James Paget, President, in the chair, an interesting debate took place upon the relation of syphilis to aneurism. In the paper on Aortic Aneurism in the Army, by Mr. F. Welch, it will be seen that the author has arrived at the conclusion that a very large number of cases of this affection result from a specific change in the inner wall of the vessel—a change which is due to the syphilitic virus. The paper, which was full of interesting facts, and embodied the results of most painstaking research, was cordially received, although it will be seen that the majority of the speakers declined to adopt the conclusions of the author.

Previous to the reading of the paper the President announced that Dr. Pavy, having succeeded in obtaining a large quantity of sugar from the urine of healthy persons, had brought some specimens of the sugar to exhibit to the Society.

After a brief communication had been read by the secretary, in which Dr. PAVY pointed out that hitherto the existence of sugar in the urine had been doubted by many physiologists and denied by most, he proceeded to show that the slight and variable reaction obtained on boiling healthy urine with the copper solution was mainly due to the presence of urates. In his experiments he had been careful to take samples of perfectly healthy urine, which had yielded no reaction with copper, and had extracted the sugar by means of acetate of lead. When urine is treated with this salt, the whole of the urates and urea are precipitated. The filtrate is then treated with ammonia, and more of the lead salt added until precipitation ceases. The sugar is carried down in this second precipitate in combination with the lead, from which it can be liberated by oxalic acid or sulphuretted hydrogen. The latter reagent is the best for the purpose, although the process is a tedious one. Dr. Pavy then showed a sample of sugar so obtained, and performed a series of tests upon it—viz., Moore's (liquor potassæ) test, Boettger's (bismuth-reduction) test, the test by reduction of copper (the solution used consisting of sulphate of copper, tartrate of potash, and caustic potash), and lastly the fermentation test. The reactions obtained by all these processes were very marked. Referring to the fermentation test as a crucial one, Dr. Pavy showed the products of fermentation—viz., carbonic acid and alcohol, the former by absorbing the gas in the collecting-tube by means of caustic potash, and the latter by means of bichromate of potash and sulphuric acid. In order to succeed with the fermentation test, it was necessary to neutralise any free acid that might be present in the product obtained from the urine.

The paper of the evening, on "Aortic Aneurism in the Army, and the conditions associated with it," by FRANCIS J. WELCH, F.R.C.S., Assistant Professor of Pathology at the Army Medical School, Netley, was then read. The following is an abstract of the paper:—The object of this paper, in view of the discrepancy of opinion on the causation of aortic aneurism, is to endeavour, by deductions made from a series of post-mortem examinations conducted at the Royal Victoria Hospital, Netley, to place certain features of causation and pathology of this vascular lesion upon a basis of stability. The average death age was thirty-two years; average period of service performed by the soldier twelve years; average duration of the lesion a year and one-twelfth. In five instances the dilatation of the vessel was multiple, the largest number of aneurisms in any one case being four; and in two instances an innominate aneurism was superadded to the aortic sac. The lesions (otherwise than the sac itself) observable in the bodies were capable of being arranged under two heads—(*a*) those mechanically produced by the pulsatile tumour, and (*b*) those indicative of a diathesis or general internal agency, and these latter were rarely otherwise than syphilitic. The main object, however, of the paper being not so much to detail the disease as to inquire into its surroundings and causation, the statistics of its dispersion throughout the service are first given to show that the disease is not peculiar to climate, station, or occupation, nor connected with age or any condition of system brought about by length of service, and upon this negative basis is superadded the positive basis furnished by the morbid anatomy and life history of the cases comprised in this paper, the deductions arrived at being placed in the form of two propositions, the first of which refers to the condition of the vessel, and is as follows:—"That the aneurismal tumours are associated with and preceded by a diseased condition of the contiguous layers of the internal and middle coats of the vessel—a tissue growth terminating in degenerations which, by impairing the elasticity and contractility of the walls, allows of their expansion and dilatation under the tension of normal arterial blood pressure, or this abnormally increased by any cause." The term "atheroma" is regarded as an extremely unsatisfactory designation of the disease, inasmuch as it expresses one possible phase only of it, that of degeneration, and allows of the accumulation under the same nomenclature of structural changes divergent in origin and progress. Two forms of vessel deterioration are embraced by it—the one a distinct tissue-growth, an end-arteritis—an active lesion, having as one of its sequelæ the aneurismal sac; the other, a mere opacity, or occasional fatty degeneration of the inner surface of the vessel—a passive phase, followed apparently by no deleterious results between eighteen and forty years of age,

the period of the soldier's service. The pathological chain of continuity between the aortic disease characterised by a tissue-growth and the aneurismal sac is complete and unbroken, and hence the important problem in etiology is to elucidate the exciting agencies in the development of the end-arteritis of the internal and middle coat, and these are given in the second proposition of the paper, which stands as follows:—"That these two forms of textural derangement of the aorta [the two spoken of as included under 'atheroma'] are dissimilar in origin and causation; that the limited passive opacity is connected with long-standing diseases of various kinds inducing a diminished vitality of the system at large; that the structural growth is, in the major number of instances, associated with syphilis, and, in a minor degree, with rheumatism and alcoholism as causations; hence it follows that as the latter phase is the commencement of that pathological sequence of events under one aspect terminating as aneurism, the means for the prevention of the aneurismal tumour must be essentially directed towards the elimination of these special exciting agencies." The 34 cases of aneurism analysed stand as under: 50 per cent. in subjects saturated with the syphilitic virus, and with no other diseased conditions to detract from this deduction; 14 per cent. where syphilis was probably present, but not beyond doubt; 5·8 per cent. in acute rheumatic diathesis; 5·8 per cent. with excessive intemperance; 2·9 per cent. with syphilis, rheumatism, and alcoholism combined; 17·64 per cent. with no known conditions, from absence of information; and 2·9 per cent. where no associated condition could be elucidated. But, as the aneurism is one sequel only of the aortic disease, a table is given to show the associated systemic conditions of the aortic lesion as exemplified in 117 cases as follows:—46·1 per cent. in undoubtedly syphilitic subjects; 6·8 per cent. probably syphilitic, but not beyond doubt; 21·3 per cent. in phthisical subjects; 14·2 per cent. with no records for determination; 5·9 per cent. with heart disease; 5·7 per cent. with various other diseases individually small. This table includes both forms of the aortic disease, the active growth as well as the passive degeneration, but shows a great preponderance with syphilis; the subjoined facts, however, separate the lesions, and place each on its proper basis. In 56 cases of syphilis terminating fatally through special lesions, 60·7 per cent. illustrated aortic nodulation, the major part of a severe type, and in about one-third of these (i.e., 18 out of 56) the vessel disease had led on to dilatation more or less pronounced—that is to say, were in the infantile stage of aneurism, and required only further development to bring them under this classification. Adding these infantile aneurisms, and including one infantile aneurism subsequently mentioned as due to the acute rheumatic diathesis, to the 34 of this paper, we have a sum total of 53, and of these 66 per cent. occurred in subjects infected with syphilis, but with no other diseased conditions to neutralise the deductions arrived at as the point of causation. Again, 106 post-mortems were taken, in which the non-existence of syphilis, both from the life history and after-death data, was fairly deducible, in order to view the subject from an opposite direction, and the following results came out with reference to aneurism and the aortic disease:—Five cases of aneurism were present, and these are included in the aneurismal table of this paper under acute rheumatism, intemperance, and no known cause. Of the aortic disease we get,—in 1 instance it was severe, and had led on to dilatation, in an acute rheumatic diathesis with great intemperance; in 5, or 4·7 per cent., the inner wall of the vessel was corrugated but not dilated; 3 phthisical; 1 alcoholism; 1 aortic valve disease; in 29, or 27·3 per cent., the lesion was to be included under the passive phase of atheroma, mere opacity, and of these 15 were associated with phthisis, and the remainder with renal affections, dysentery, diabetes, scrofula, lupus, cancer, in nearly equal proportions. Hence, then, from whatever light we regard the disease, the same feature becomes apparent, and as these aortic aneurisms are associated with syphilis to the extent at least of 66 per cent., and as nodular disease of the aorta is not often exemplified otherwise than with it, it becomes an incontrovertible deduction that the syphilitic virus must be regarded as a very potent cause in the development of the arterial lesion and its sequel, aneurism; but not the only one, for, as minor agencies, we must include the acute rheumatic poison and alcohol. It is considered that the chest constrictions to which the soldier is liable from the accoutrements, pack, &c., act as fostering influences to the diseased conditions engendered by syphilis, rheumatism, and alcoholism, these probably inducing dilatation in the deteriorated vessel when no such result might ensue under ordinary circumstances and under such amounts of physical exertion as pertain to the civil portion of the community. The summary of the paper is as under. (1) That in the army we have a lesion of the aortic walls characterised by the presence of a fibroid growth mainly in the internal coat, which, as a rule, ultimately disintegrates, and that this growth is connected with syphilis in a major degree, and rheumatism and alcoholism in minor degrees as exciting agencies. (2) That this disease of the aortic coats may retrogress without producing any marked ulterior results upon the system at large, but if extensive or severe, as a rule it is followed by one of three fatal phases—formation of aneurisms, implication of aortic valve, or hypertrophy with or without dilatation of one or more of the heart's cavities. (3) In the army there is also a lesion of the aortic walls characterised by limited opacity or fatty change of the normal textures of the internal coat. This is common to all diseases associated with prolonged general deterioration, and especially lung destruction, but it does not appear *per se* to lead to ulterior results. (4) That the chest constrictions and temporary forced exertions to which the soldier is liable, act as adjuvants to the aortic disease in the production of aneurism, as fostering influences to the germ laid by syphilis, rheumatism, and alcoholism. (5) That in the adoption of preventive measures against aneurism the attention must be primarily directed against the causes of the aortic disease, notably the suppression of syphilis, and secondarily against the conditions of dress &c. which assist in its development.

A vote of thanks having been accorded to the author of the paper, the PRESIDENT pointed out that it raised the whole question of syphilis in relation to aneurisms (other than aortic) in young subjects. The syphilitic origin of aneurism had frequently been mooted, and the opportunity was now afforded for the expression of opinion upon the subject.—Dr. DOUGLAS POWELL, after alluding to the value of the accurate and minute pathological details contained in Mr. Welch's paper, said that the question really was—is the arterial lesion he describes one special to syphilis, or is it similar to, or identical with, that found in non-syphilitic subjects? On this point there was great discrepancy between the cases of aneurism occurring in civil and those in military life. He confessed that he had only met with one case in which it could be said with certainty at the post-mortem examination that the lesion in the aorta was syphilitic. There was here the same nodulation and depressions of the inner coat as described by Mr. Welch—not, however, limited to the aorta, but affecting also the pulmonary artery. It was, indeed, the occurrence of this lesion in these two sites that rendered the view as to their syphilitic origin a feasible one. He did not believe that the lesions described in the aorta alone could be held to be distinctive of syphilis, and he could not help thinking that army surgeons had been led to exaggerate the relationship existing between syphilis and disease of the great vessels. Disease of the heart is much more common in military life than in the civil community, and yet syphilitic disease of the heart is notoriously rare. It did not appear that any of the author's cases of men "saturated with syphilis" had shown syphilitic affection of the heart, and he thought this should be taken into consideration before referring the lesions in the aorta to that disease. In round numbers, out of 500 soldiers discharged from the service or dying daily, 450 had heart disease, and the remaining 50 syphilis. Then had not the author been a little biased by the life history of his cases? The number of cases returned as syphilis in the Army Returns was very great, and it was a question whether in many cases the slightest venereal excoriation had not led to the case being recorded as one of syphilis. It was impossible that any case of venereal disease should escape being recorded since the men were periodically examined; and he (Dr. Powell) believed that many men had syphilis written against them who were not syphilitic, whereas many who (medically speaking) were intemperate had not been returned as such. In the Indian Army Reports the number of cases returned under the head of "constitutional syphilis" exceeded the total number returned under the

head of local disease of the generative and urinary organs; and it was significant that of these cases of "syphilis" only about one in three exhibited secondary symptoms. He thought, then, the value of the evidence deduced by the author from the life history of his cases to be much weakened, owing to the inaccuracy of the record.—Mr. BRUDENELL CARTER was desirous of a more precise definition of the word "syphilis," as employed by the author of the paper. Was the patient to be regarded as syphilitic in whom in previous years there had been slight syphilitic manifestations which had never further developed? He had lately seen a patient who died from aneurism, who in 1859 had exhibited a slight syphilitic rash, but who had been free from any manifestation of the disease from that date to the time of his death. What was the definition of syphilis in the public service? Out of 1000 volunteers for the Arctic expedition, only 9 were accepted, all the remainder being rejected as being the subjects of syphilis! If the same criteria existed in the other branch of the medical service as in the navy, not much value could be placed upon the statement that the patient had had syphilis.—Mr. MYERS said that he had arrived at totally opposite conclusions to the author of the paper. In the first place, the statistics of Mr. Welch were quite different from those of Professor Maclean, whose report showed that syphilis could *not* be regarded as a cause of aneurism, for in that report, out of 51 cases, only 6 were due to syphilis. Surely if there were a specific lesion of the aorta it would have been recognised before now. Syphilis is admitted to be a cause of degeneration of all parts of the body, and the more it affects the constitution the deeper are the tissues attacked by it. How is it that the aorta, on Mr. Welch's showing, is alone affected of all the deeper tissues? Mr. Myers further pointed out that at Netley men were received chiefly from foreign parts, who were the subjects frequently of a complication of diseases, of which syphilis might be one; but how could it be said in such cases to be the origin of arterial lesions? He believed rather that aortic aneurism was due to the strain put upon the vessel chiefly by constriction from the outside. The parts at which aneurism occurs are parts which are most subjected to the blood-pressure when the circulation is impeded. He admitted the existence of syphilitic degeneration of the arteries as distinct from atheromatous degeneration, but thought it did not bear any specific characters.—Dr. DRYSDALE would have liked further details on the cases alleged to be syphilitic. In reply to Mr. Carter's query, he would say that it was not of the least importance whether the subject of an aneurism had suffered from a slight or an aggravated attack of syphilis. He had seen cases of aneurism undoubtedly attributable to syphilis. Syphilis, with slight external manifestations, was no less dangerous than when the disease was more manifest.—Sir WILLIAM GULL said that he must take great exception to the use of the word "node" as applied to the arterial degeneration referred to, for he doubted much if there was any pathological distinction between this form of arteritis and other forms. Indeed, the author of the paper admitted that the same nodular condition of the aortic lining membrane occurred under other states. Then a syphilitic lesion is something very characteristic—e.g., a syphilitic rash has certain characters stamped on it, by which it is at once recognised as specific. Therefore if these same arterial inflammatory changes can be attributed to rheumatism and to alcoholism, then it would limit the part played by syphilis to a predisposing cause. He was surprised to hear Dr. Drysdale say that he had seen cases of aneurism due to syphilis.—Dr. DRYSDALE: "I meant cases of aneurism in syphilitic subjects."—Sir WM. GULL: "There have been many cases of aneurism then due to syphilis." Mr. Welch seemed to regard aneurism of the aorta as a sort of syphilitic tumour. He (Sir William) believed that those cases of reputed aneurism which were said to be cured by iodide of potassium were really not aneurism at all. They were examples of mistaken diagnosis. He had seen one case in which an abdominal aneurism was said to have been so cured. But of what value are such statements unless confirmed by post-mortem observation? Before then admitting the therapeutical efficacy of iodide of potassium in such cases, the diagnosis of aneurism must be undisputed, and that it can only be by subsequent dissection. He believed that syphilis was a cause of aneurism, but probably only indirectly so. What proof had Mr. Welch, besides the disease in the aorta, that his subjects were syphilitic? Were there undoubted syphilitic lesions in the other viscera? The weakened and degenerated state of the heart in aneurism was doubtless due to the kind of life such patients were obliged to lead.—Mr. WELCH, in reply, said that he was not surprised at the doubts that had been expressed, for before he took up the subject he himself would have been surprised at the results he obtained. His cases were based upon the life history, taken from registration reports, in which each time the man is ill that fact is recorded, as well as the kind and degree of syphilitic infection, if any; and also upon the post-mortem data, drawn up by men who were not acquainted with the previous history of the case. In nearly all his cases there had been primary syphilis, followed by eruption on the skin, glandular affection, and periosteal nodes. The lesions in other parts found after death embraced indurated glands, nodes on the cranium, and often cirrhosis or gummata in the testicle. The absence of other lesions he had explained in his paper by the fact of the aortic disease leading to early death. Nor were any of these men the subjects of other disease, as Mr. Myers had suggested, nor had they been so in their life history. The fact of the arterial changes being syphilitic was not altered whether the changes were called "nodes" or not; nor was that fact set aside because a small proportion of cases could be referred to other influences, not syphilitic. A periosteal node was not solely produced by syphilis.

The Society then adjourned.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting on November 3rd, 1875, William Overend Priestley, M.D., F.R.C.P., President, in the chair, the following gentlemen were elected Fellows of the Society:—John Ford Anderson, M.D., R. S. Fancourt Barnes, M.B., John Branson, L.S.A. (Rotherham), and William Stewart, L.R.C.P. Ed. (Barnsley). The President announced that Dr. Farre had accepted the Honorary Presidency of the Society.

Dr. EDIS exhibited an Infant with Hydrocephalic Head, which impeded delivery. It presented by the breech. Traction upon the trunk failing to accomplish delivery of the head, Dr. Edis was sent for. Examination of the abdomen showed that no second child was present, so that the question of twins with locked heads was negatived. The patient was a pluripara, and vaginal examination failed to detect any deformity of the pelvis. The child being dead, and the head evidently much enlarged, perforation behind the right ear was effected, a gush of clear fluid confirming the supposition that had been made that the case was one of hydrocephalus. Delivery was then readily accomplished. The head, when distended with fluid, measured seventeen inches in circumference. The patient convalesced normally. The placenta had been examined microscopically by Dr. Coupland, who failed to detect any change in its structure throwing light upon the case.

Dr. PROTHEROE SMITH exhibited a Fœtus of six months and a half, the subject of General Dropsy. The mother, aged thirty-five, had previously had three living children born, three miscarriages, and three premature labours at the twenty-sixth week following each other, the last of which was now shown. In the last two pregnancies she had suffered from albuminuria and liver derangement. Before the eighth labour the patient was kept lying up and well fed; before the last she got about and was thin. On both occasions there was incompressibility of the pulse and flushing of the face, and the labour was attended by considerable hæmorrhage both before and after. The body of the fœtus was anasarcous, there was a large quantity of clear brownish-yellow fluid in the peritoneal cavity, and also some fluid in the pericardium and pleural sacs; the kidneys were healthy; the placenta was large, and consisted of only the fœtal portion.—The PRESIDENT inquired whether there was any trace

of syphilis in the mother, and whether the œdema existed during the life of the fœtus, or was only a post-mortem appearance, the result of decomposition.—Dr. SMITH replied that the fœtal heart had been heard the day before birth.—Dr. BRAXTON HICKS inquired whether there was any symptom of obstruction to the funis, to which Dr. SMITH replied in the negative.—Dr. SNOW BECK stated that the fœtus when born was in such a fresh condition as to preclude all idea of decomposition.

Mr. LAWSON TAIT related the particulars of a case of General Dropsy in a Fœtus, where the skin was so tense that it was not possible to bend the limbs without risk of bursting the skin. The scalp was so distended that the bones could nowhere be felt, and, in fact, the head had been mistaken for the breech during labour. The abdomen was enormously distended by highly albuminous fluid, as also the pleuræ and pericardium. The placenta was large and very œdematous. The cause of the general dropsy seemed to be the premature closure of the channel between the auricles, there being no direct opening between the auricles through the foramen ovale.—Dr. PROTHEROE SMITH considered this to be evidently a disease primarily and altogether of the ovum, whereas in his own case the disease had originated from the disordered health of the mother. He would like to know whether any of the fellows had met with similar instances—hyperæmia with liver derangement. There was in his own case great peculiarity of the pulse, which was extremely incompressible. The mother's lips were of a crimson tint, and she had had several abortions. One patient, who had aborted seven times, he had bled once, and she went to full time. In his case he had tried abundance of fruit and wine in one pregnancy, and exactly the reverse in the other, the result being the same in both. He had witnessed in a few cases frequent consecutive abortions, at about the fifth and sixth month, arrested by venesection, and followed in succeeding pregnancies by living children.—Dr. MADGE said he could hardly accept Dr. Smith's explanation as to the cause of the death of the fœtus. He had given considerable attention to the subject, but he had never understood that a common disease or derangement of the liver in the mother could affect the child in utero in a somewhat similar way. It was well known that the mother may be morbidly affected in many ways, even with albuminuria resulting in convulsions, and still give birth to a perfectly healthy child. A syphilitic history, if such existed, might afford an explanation. The fœtal liver, receiving the tainted blood direct from the mother, became affected with syphilitic inflammation, and deposits leading to obstruction of the portal system and ascites.—Dr. ROUTH inquired if there had been any specific examination of the foramen ovale of the first child.—Dr. HEYWOOD SMITH replied that the heart, on examination, was found to be perfectly normal. The last three times pregnancy had ceased at the twenty-sixth week, showing that there was some disease of the ovum. The liver was also disordered in former confinements. He would be glad if any Fellow of the Society could throw any light upon the intermittence of the albuminuria during pregnancy.—Dr. SNOW BECK remarked that he had the opportunity of examining both Dr. Smith's cases, and had also seen two other very similar specimens. The clinical histories had been very much alike: healthy living children at first, then premature expulsion of dead fœtuses about the sixth month, presenting evident signs of previous and serious disease. Effusion of fluid into the peritoneal cavity existed in all, far too large in quantity to be the result of post-mortem change. The organs, excepting the liver, were healthy; this was paler than normal, soft, readily torn with the finger; the liver-cells being much broken down. The parents were singularly free from even the suspicion of a syphilitic taint. The effused fluid was too large and too generally diffused to be caused by any mechanical disturbance of the circulation. The only probable explanation of this condition of the fœtus appeared to be from some deficient or altered state of the nutrition, whether fœtal or maternal it appeared impossible to determine from the facts at present known.—The PRESIDENT said that in considering the pathology of these cases it was well to bear in mind that the subcutaneous cellular tissue in children after birth was prone to become œdematous from the infiltration of serum in certain depressed conditions of health. It was no uncommon occurrence in hospitals to find children, who had been ill-fed and exposed to adverse influences, the subjects of a general œdema, which might proceed to an extreme degree, without such malformation or disease as to account for it. The villi of the placenta in Dr. P. Smith's case had the appearance of being atrophied, and he might suggest that possibly the œdema in the child was due to its imperfect nutrition in utero, and to the passive congestion this induced.

Dr. J. G. SWAYNE, of Bristol, brought forward a communication "On a New Form of Blunt Hook and Sling, for assisting Delivery in Cases of Breech Presentation." The instrument consisted of an ordinary blunt hook, with the end curved back upon itself, so that a loop could be hitched upon it. When the hook was withdrawn after being passed over the groin, the sling, consisting of a piece of strong silk cord, with a loop at each end, was left *in situ*. Traction was then made in the usual way, and as the sling was padded there was less risk of injuring the soft parts of the child than when the ordinary blunt hook was employed.—Dr. J. BRAXTON HICKS thought that in the use of the blunt hook sufficient attention had not been given to the assistance afforded by external pressure, applied to the fundus uteri, in breech cases, and the delivery of the aftercoming head through the brim. He thought half the strain was taken off the thigh, and that without undue crushing of the uterine wall, by the hand pressure. Text-books generally omitted to notice the great help given, and although he had no doubt some practitioners employed extreme pressure, yet very frequently it was never thought of, but all the force was put upon the hook.—Dr. MADGE had had reason to be dissatisfied with the blunt hook. He was afraid that in any case when much force was required some injury must be inflicted, whatever the plan adopted. He had suggested covering the hook with india-rubber, compressed sponge, or wash-leather. If this could be properly carried out it would probably be a safer instrument than Dr. Swayne's, and could be much more quickly and easily applied.—Dr. AVELING remarked that the life of india-rubber was only about three years; it then became brittle, and if put aside would be found useless. He feared therefore that the suggestion, though ingenious, was not very practical.—Dr. C. GORDON agreed that whenever a foot could be brought down, in impacted breech, it was the best plan to adopt; but where this was impossible the hook must be employed. He had recently tried that known as Lazarewitch's, but found that the bulb at the extremity of the hook was the point which received the force applied, and pressed severely upon the tissues. He regarded it as a dangerous instrument. In one instance the skin had been cut through, and much bruising of the surrounding soft tissues produced by its employment.—Dr. LAWRENCE had seen a case where the saphena vein had evidently been lacerated from the use of a blunt hook. The sling was far less likely to cause injury.

Dr. GEORGE ROPER read a paper "On Prolapse of the Funis during Labour," tending to show that this accident was rarely primary, but mostly the result of some other abnormality. After alluding to the various conditions predisposing to this complication of labour, and mentioning the different methods of accomplishing reposition, he stated that the real difficulty consisted in keeping the cord within the uterus after it had been returned. The best means of doing this seemed to be in securing the firm adaptation of the presenting part to the os uteri. The question of turning in place of forceps was then considered, the author preferring the latter method, considering that there was less shock to the mother. Reports of six cases were given, the author concluding by stating that prolapse of the cord is for the most part associated with some other complications of labour, and that it behoved us to make observations as to what that complication might be, as the management of the cord would in a great measure depend upon the nature of the complication; in some cases the funis could be saved from pressure, in others not.—Dr. BRAXTON HICKS had employed cephalic version in transverse presentations with prolapse of the cord, using one hand externally to press down the presenting part into the os uteri, the funis being pushed up simultaneously by the internal hand.—The PRESIDENT inquired if Dr. Hicks combined the postural method with reposition of the cord.—Dr. HICKS replied that he had not found it necessary. He had experienced no difficulty in pressing up the head and carrying the cord up by the same hand as quickly as possible, and then the cut-

side hand pressed the head into the os. In prolapse with head presentation, pressing the breech to the fundus is not needed as in transverse presentations. — Dr. BRUNTON thought Dr. Roper had not given sufficient prominence to the postural method. He (Dr. Brunton) had found it the most satisfactory of all methods of treatment of prolapse of the cord, and considered it applicable in all cases. He questioned whether Dr. Hicks would be able with his middle finger to reduce a long loop of cord protruding from the vagina; by the postural method this could be done.—Dr. EDIS called attention to the correct postural position being the genu-pectoral or knee-shoulder, not knee-elbow position, as had been spoken of by many.—The PRESIDENT referred to a paper read by Dr. Thomas, of New York, some eighteen years ago.—Dr. ROPER asked what was the *rationale* of the postural position; gravitation would not account for it.

Mr. LAWSON TAIT read a note on a "Diseased Placenta." The author narrated briefly the outlines of a case. The patient, aged twenty-nine, miscarried three months after marriage. She next bore a child at full term, which died of convulsions three days after. She next miscarried between the sixth and seventh month, and again between the seventh and eighth month, the child being alive. When one month advanced with the next, Mr. Tait put her upon chlorate of potass and perchloride of mercury, and she went her full time and was delivered of a healthy living child. The chief point of interest was in the appearance of the placenta. It was disproportionately small to the size of the child, and fully two-thirds of its surface had undergone a peculiar change. This the author had examined most minutely, and described most thoroughly, the communication being one of much scientific interest.

Reviews and Notices of Books.

Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques. Tome XX.: LACRYMALE GLANDE—LUXATION. Paris: Baillière and Son. London: Tindall and Cox.

THIS volume contains, amongst others, the following important articles:—"Langue," by MM. Demarquay and Rigal; "Lait," by M. Straus; "Larynx," by Bœckel; "Lépre" and "Lichen," by M. Hardy; "Leucocythæmie," by MM. Jaccoud and Labadie-Lagrave; "Leucorrhœa," by M. Stoltz; "Lèvres," by M. Laugier; "Lit," by M. Poncet; "Lithotritie," by M. Demarquay; "Luxations," by M. Valette; "Ligatures," by M. Sarazin.

The volume opens with an exceedingly good article by M. Od. Lannelongue on the Anatomy, Physiology, and Surgery of the Lachrymal Gland and Apparatus. The difficult point of the cause of the entrance and descent of the tears through the small canaliculi is, according to the author, satisfactorily explained on the theory of Ross, which is that the orbicularis in closing the eye contracts from without inwards, and thus drives the tears into the lachrymal sac. The symptoms of true fistula lachrymalis are given, and the several methods of treating it, including that of von Graefe, which consisted in removing the lachrymal gland (rather a heroic measure for so small a disease) are described. The author, however, has not noticed the very ingenious method suggested by Mr. Hulke some years ago in a case that came under his care, in which he re-established the normal opening, whilst he closed the cutaneous one. The subject of inflammation of the lachrymal sac is described in accordance with Mackenzie's division, and the author very honestly confesses that neither internal nor topical applications are of much service when the inflammation has fairly set in. In performing the little operation of slitting up the canaliculus, M. Lannelongue recommends that the *upper* duct should be divided. Speaking of the origin of obstructions leading to abscess, accompanied by disease of the bone, M. Lannelongue is in accordance with Wecker and with our own experience, that the disease of the bone in many instances is not the result of the violence of the inflammation, but that the bone or periosteum is the part primarily affected either from scrofula or syphilis. He approves strongly of the injection of medicated fluids through the canaliculi in the early stages of the affection, practised with a view of modifying the mucous membrane. We fancy it is but rarely practised in this country. He recommends strongly Stilling's proceeding for obstruction in the lachrymal sac, which consists in slitting up the canaliculus, and pushing down the duct a knife with a peculiarly-formed narrow triangular blade, turning the instrument once or twice, so as to divide new portions. It is founded on the supposed presence of muscular fibres in the walls of the canal, the incisions allowing them to retract. The success is stated to have been very great in the hands of more than one distinguished operator.

The articles "Langue" and "Larynx" exemplify well the progress that has been made during the last thirty or forty years in special departments of surgery. On referring to "Cooper's Dictionary of Surgery," published in 1838, we find only four pages devoted to the consideration of the affections of the tongue, whilst in regard to the diseases of the larynx the only reference made to them is included in the article on "Laryngotomy." In the volume before us these two subjects occupy just one hundred pages each, and contain a large amount of information in regard to the varieties, causes, symptoms, and treatment of numerous affections that, if not always capable of being successfully dealt with, are now diagnosed without difficulty.

The article on the "Tongue," by MM. Demarquay and Rigal, commences as usual with an anatomical description, which is sufficiently accurate, though some objection might be raised on embryological grounds to the propriety of calling the hyoid bone the skeleton of the tongue. An interesting section is devoted to the function of the organ and of the nerves supplying it. M. Demarquay states that he has been able to trace the chorda tympani beyond the submaxillary ganglion, beneath the mucous membrane of the dorsal surface. There seems to be reason for believing that it is distributed to the vessels with branches of the sympathetic, and this may account for some of the peculiarities in the sense of taste observed in cases of paralysis of the seventh. The pathology of the tongue is considered under the following heads:—(1) Vices of conformation, (2) inflammation, (3) abscess, (4) gangrene, (5) wounds, (6) burns, (7) the pustule maligne, (8) ulcers, (9) foreign bodies, (10) tumours, (11) constitutional affections; and several of these are subdivided.

Under the head of "Larynx," an account of the anatomy and physiology of this organ is given by Eugene and Jules Bœckel, with a woodcut showing the appearances presented by a vertical transverse section of the vocal cords. The varieties of the laryngoscope are fully detailed, with the difficulties that attend its use and the mode of overcoming them, which are illustrated with appropriate diagrams. The writers enter into the consideration of inflammations of the larynx. They describe the symptoms and pathology of laryngitis, but, curiously enough, dismiss the subject of its treatment half contemptuously with the observation that it is "*connu de tout le monde.*" This omission is, however, supplied in the remarks that are subsequently made in regard to œdematous laryngitis, &c. We do not find the value of emetics dwelt upon, though an emetic and a full dose of quinine will sometimes cure a severe case of laryngitis. The bibliography of this article is extremely well given.

The article on Leucocythæmia is very instructive. The term, as the authors, MM. Jaccoud and Labadie-Lagrave, remark, invented by Bennett, really indicates only a sym-

ptom of a much larger and wider disease, and, by directing attention to the symptom and not to the primary dyscrasia which produces it, long retarded the advance of knowledge. They prefer the terms "generalised hypertrophy of the lymphatic ganglia," suggested by Cossy, and "lymph adenoma," proposed by Wunderlich. The proportion of 1 white to 335 red corpuscles, which is regarded as the norm by Moleschott, has been in exceptional instances raised to 1:2, and in one case to 1:1 (Isambert). In one extraordinary case Welcker estimated that there were only 2,000,000 red corpuscles in the whole body. It would appear that the microscopic examination of the blood will alone suffice to diagnose paludal cachexia from that of lymphogenic origin. In the former the blood almost invariably contains black pigment, but additional signs may be found in the absence of enlargement of the glands, and in the history of exposure to marsh miasm. The peculiar characters of the urine are dwelt upon, especially the deficiency of urea and the excess of uric acid, and M. Jaccoud asks whether this is not referable to the oxidation of the hypoxanthine which the blood of leucæmic patients almost invariably contains.

Fifty pages and a dozen woodcuts are devoted to the subject of "Ligatures," which are considered first generally, and then specifically by M. Sarazin. The difficulties experienced in tying a wounded artery when the tissues, in consequence of being swollen and infiltrated with blood, are almost unrecognisable, are forcibly depicted, and he gives an instance where he tied the subclavian for a wound of the axillary artery, and, after a few days, the bleeding recurring, he was obliged, under much more unfavourable circumstances, to cut down and tie the artery above and below the seat of injury. No allusion is made to Lister's carbolic acid atmosphere, which is so important an adjunct in dealing with such cases as these.

The important article "Lithotritie" is the joint production of Demarquay and Cousin. Like all the other longer essays in this work, it is preceded by a short historical *résumé* in which the salient points are given. The first notice of lithotrity seems to go back to the beginning of the ninth century, when a monk, being tormented with a renal and vesical disease, introduced instruments *per vias naturales* into the bladder, and, having broken down the stones he found there, extracted the fragments. It was not, however, till 1823 that lithotrity became a practicable operation, owing to the ingenuity and perseverance of Leroy d'Etiolles and, after him, of Civiale and Heurteloup. Illustrations are given of the various forms through which the instrument has passed, from the days of its infancy to the present time, both in France and England.

A Guide to the Microscopical Examination of Drinking Water. By J. D. MACDONALD, M.D., R.N., F.R.S., Deputy Inspector-General of Hospitals and Fleets; Assistant-Professor of Naval Hygiene, Army Medical School. With 24 Lithographic Plates. London: J. and A. Churchill.

DR. MACDONALD has given us a work which will prove of great use to medical officers of health. He has drawn with pen and ink on lithographic paper, and has then transferred to stone, the chief objects seen in the sediments of drinking water. By adopting this plan of drawing he has been able to give no less than twenty-four plates at a very small cost. He has first drawn the mineral substances, then the dead vegetable or animal structures which commonly pass into water, and then the living plants and animals which are more or less found in all waters. His object is, he tells us, to enable these various bodies to be easily identified by the observer. He has not attempted to decide whether any of them are hurtful or otherwise; he considers this to be a point for future inquiry, and at present he has merely attempted to give medical officers of health a means of making out the nature of what they see on microscopic examination of sediments in water. With the exception of the plate of Bacteria (Plate 6), which is copied from Cohn, and a few others where specimens could not be procured, all the drawings are original, and from waters examined by the author. Considering especially how they have been drawn, they are marvels of artistic skill, and some of the plates are quite beautiful. They are not, of course, coloured, as this would have made a costly instead of a cheap book, and the object has been to provide a work which all can purchase. The letterpress is placed at the end, and is so arranged as to render the identification of the objects easy even to those who are not familiar with the microscopic world in water. For example, in Plate 15 (not Plate 14, as stated by a press error at page 42), the monads are drawn; at page 42 will be found the means of identification, given in a tabular form, and so arranged as to present no difficulty even to a beginner, as the numbers in the tabular statement are identical with those on the plate. Henceforward no medical officer of health need close a report on water by observing that it contains "floating organisms"; he may, if he pleases, identify almost every form, except possibly the immature or transitional states.

It is clear that this identification is a necessary preliminary to the inquiry as to whether particular classes of plants or animals in water indicate particular impurities, or whether they are connected with special diseases. These are inquiries of singular importance, and have all to be still worked out. By this publication Dr. Macdonald has greatly advanced our means of attacking these difficult problems, and we do not doubt that medical officers of health will feel grateful to him for his timely and useful little work. We hope, indeed, that this book may lead young microscopists generally to study the world of waters; they will find it a very good introduction to this part of zoology.

Chemistry: General, Medical, and Pharmaceutical; including the Chemistry of the British Pharmacopœia. By JOHN ATTFIELD, Ph.D., F.C.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain. Sixth Edition. London: Van Voorst.

PROFESSOR ATTFIELD'S manual is so well known and so universally admired and used that it is hardly necessary to do more than notice the appearance of another edition, carefully revised and illustrated, for the first time, by woodcuts. The book is a storehouse of well-arranged and accurately-stated facts. The methods are judiciously chosen and clearly described, and altogether students of pharmacy and of materia medica may well be congratulated on having for their guidance so excellent a text-book.

MORTUARIES IN THE METROPOLIS.

To the Editor of THE LANCET.

SIR,—As I am desirous of making out a complete case for legislative action on the question of the establishment of mortuaries in the metropolis at the forthcoming deputation of the Strand Board of Works to the President of the Local Government Board, will you permit me to request the medical officers of health, Poor-law medical officers, and others, to forward me any information they possess as to the evils that arise from the want of such accommodation.

I am, Sir, your obedient servant,

33, Dean-street, Soho, Nov. 22nd, 1875. JOSEPH ROGERS.

WE are asked to state that the Provisional Committee of the British Medical Defence Association invite the attendance of medical practitioners at a meeting to be held at the Medical Society's rooms, Chandos-street, Cavendish-square, on Tuesday afternoon next.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 27, 1875.

DURING the past few years a custom has grown up at some of our leading Medical Societies which, if it were only carried out on certain definite and fixed principles, might aid greatly in the advancement of knowledge on many vexed questions in Medicine. We allude to the institution of discussions on subjects of stirring interest, where much difference of opinion prevails. Such debates have an intrinsic value in themselves, as they give opportunities for the expression of their views by individual workers on the subject; and it might have been thought that the result would have been something tangible and satisfactory. But it is much to be questioned whether they have hitherto really produced so much benefit or added to our resources in the treatment of disease as much as they might reasonably have been expected to do. In reviewing the subjects that have been so treated we find, in the first place, that we have learnt many different views on the subject of tubercle in its anatomical relations to phthisis—views expounded by men who had devoted much time and study to the question, and whose opinions on such a subject carried much weight with them. We have had an equally luminous exposition of the views held upon the kindred subject of cancer in a debate which only served to show how wide was the gulf between those who adopt the theory of its local origin and those who deem it to be the expression of a constitutional disease. We have had similar divergence of opinion on the subjects of pyæmia and puerperal fever in debates the result of which was, we venture to state, no more satisfactory than in those which preceded them. Then we have had the germ theory of disease discussed in a manner which left the one side victorious, less, perhaps, by reason of the preponderance of facts than because the opposite views were so little and so feebly advanced; and, finally, within the last few weeks we have witnessed an attempt—abortive it is true, and stifled in the birth—to elicit the opinions of metropolitan surgeons as to the value of the plan of treatment known as antiseptic. We have had all these subjects fully expounded in a series of speeches, many delivered after careful preparation, and some even clothed in an eloquence which it would have been thought could scarcely have been made to cover the bare details of science. We may well ask ourselves, now that we are on the eve of another debate dealing with a most important subject,—How much have we gained by them? Is the subject of puerperal fever, for example, settled now once and for all?—and are all men of one mind as to the nature and origin of that disease since the long debate at the Obstetrical Society last summer? Is there but one opinion now prevailing as to the origin of cancer?—or, at least, have we gained a clearer insight into the nature of this disorder? Surely not; for, even putting out of question the one-sided character of some of these debates, the result has been in most cases to leave individual opinion much in the same position as before they were started. How many, for example, did Mr. DE MORGAN convince by his logical and closely-reasoned argument in favour of the local origin of cancer?—for on this question opinion was so equally divided that anyone who had before framed his views on the subject can have seen no reason to change them. Thus unsatisfactory as the issue has been in the past, bewildering as has been the conflict of opinion to him who has sought for light where he has had most reason to expect to find it, we must confess to view with some misgiving the prospect of another debate on a subject which it is notorious is one on which much diversity of opinion exists. We can safely predict that, if the forthcoming debate on syphilis be pursued on the same principles as those discussions we have already experienced, the profession will have gained but little from its having taken place.

It is certainly, then, time to see if there cannot be devised some means by which such debates might be rendered more profitable. We have before now indicated some of the paths which it is desirable that these discussions should take, so that on their termination we may be left with some fixed opinions, some definite and precise conclusions.

In the first place, it is incumbent upon the Society in which the debate takes place that the subject matter of the debate should be strictly confined to the objects for which the Society was founded. If it be desirable to treat the subject from a clinical point of view, the facts adduced should be strictly the result of bedside observation. If the pathology of the subject discussed be in question, to the consideration of its pathology, and of that alone, should the debate be limited. Hence the obvious necessity of fixing clearly beforehand the limits of the debate and the branches of the subject to be discussed. Without some such guidance, the speakers will, like ARTHUR'S knights, pursue "wandering fires" and lose themselves in the quagmires of vague hypothesis.

In the next place, the debate should be wound up by an authoritative statement, embracing the views of the various speakers, and enabling the hearer to judge of their relative value and importance. At present, a host of heterogeneous opinions, emanating from men whose opinions are indeed of great individual weight, are flung down before the profession *en masse*, and perhaps even the very authority they bear renders the task of elucidating the truth of greater difficulty. We by no means advocate such a conclusion as might be obtained by a division being taken at the close of a debate; for, even if such a solution to the difficulty were desirable, it would often be impossible, so varied and numerous are the "amendments" that crop up one after another on the propositions laid down by the opener of the discussion. But a definite conclusion might fairly be arrived at, if it be made incumbent on the president to close the discussion by gathering up the chain of evidence and laying before the Society the points of agreement and difference in such a manner as would enable the profession to arrive at a reasonable and just verdict, and to feel satisfied that their conclusions were right. One manifest objection to such a course might be found in the disinclination of the president to adopt it. He may feel, and rightly too,

that he was himself more or less of a partisan, and would thus be unable to present the facts in as impartial a manner as if he were on the judicial bench; and it would perhaps be too much to expect this of him. But, failing this, we do not see why, in questions of such great import as those that have already been discussed and as that which is shortly to be reviewed, a committee of the Society should not be appointed to report on the whole debate, and draw certain broad and specific conclusions from the facts adduced on all sides. It is premature yet to point out the example of the Medical and Chirurgical Society in this respect, although we have no doubt the Council will accept the recommendation of Dr. WEST to refer the subject of Croup and Diphtheria to a committee. It can only be in this or some other similar manner that we can hope to arrive at unanimity, or rather stability, of opinion, sufficient to guide the feet of those who now lose themselves in the maze of individual views.

That some such scheme is desirable there can be little doubt; and that it is practicable there is ample evidence in the proceedings of other scientific bodies both in this country and abroad. Certainly of the value of these debates there can be or ought to be no two opinions. The time has arrived when from the stores of accumulated material we may fairly hope to gain some important general facts and principles to guide our daily practice. But if such debates are to have any real and permanent value—if they are to mark an epoch in the history of medicine, and are not doomed to be recorded as a congeries of individual views tending no whither,—then some such reform in the conduct of them should be at once initiated. In one Society, at least, the debate has become an annual institution; and here, if anywhere, it is desirable that its results should be settled and enduring (so far as the shifting basis of the science will allow). If, on the other hand, this annual debate be conducted in the future as it has been in the past, it will not ensure the objects for which it was started, and will leave but little lasting impression on, and produce but little advantage to, the profession at large.

THE intention and ingenuousness of Mr. MARSHALL'S proposal to institute a compulsory examination in Anatomy at the Royal College of Surgeons of England at the end of the first winter session, are so laudable that it is a duty far from pleasant to be compelled to say anything unfavourable of the scheme. But in the interests of medical education we feel bound to point out the fallacy of its guiding principle. In estimating the merits of the project we must, however, be careful not to mistake the will for the deed. Mr. MARSHALL'S prime object is to make sure that the knowledge, and especially the knowledge of anatomy, acquired by candidates for the diploma of the College of Surgeons shall be not only more extensive, but sounder than it has hitherto been. This desire is in itself highly commendable, but not original or peculiar, and is probably participated in by every member of the profession. It is as to the mode in which it is proposed to secure these objects that any serious difference of opinion exists.

Many of the evils to which Mr. MARSHALL has drawn attention in his memorandum are, alas! too rife. Everyone engaged in the tutorial departments of the medical schools knows well that much valuable time is wasted by many first-year's students; and that the knowledge acquired by the candidates for the College examinations is not only deficient, but unsound and evanescent. The question is whether matters would be improved by compelling students to prepare for an elementary examination at the end of the first session in one and only one of the subjects in the prescribed course of study for that term. Experience says no! The experience of most competent authorities in educational affairs, and the experience of the College of Surgeons itself, have shown that such a course would be the surest means of defeating the real objects of education. It is no exaggeration to state that the certificate and examinational systems of the College have done more to damage the cause of medical education in this country than anything else. Professional grinding and its attendant evils have been the direct outgrowths of the hampering regulations that have been imposed upon students by the Council of the College, and of the unsound method of testing the students' knowledge. While the Council has always vainly flattered itself that if its curriculum has been carried out the efficient training of the student has been secured, the cause of true education has suffered. Not only have regulations in many instances been systematically evaded by teachers and pupils, but, even where they have been complied with, evil rather than good has resulted. Students have worked for examinations, and the knowledge thus acquired has been unsound and of little permanent value. A certain number of facts have been "crammed" within a limited space of time; but there has been no mental assimilation, no organic registration of ideas,—and what had been learnt has been speedily forgotten. The College examinations have proved quite worthless as tests of the candidate's reason and judgment, and even of his training, and serve only as exercises of memory and of coolness and self-possession. It is as Dr. WHEWELL has affirmed: that when the student works for examinations only, "he does not wish to understand, but to appear to understand"; and any teacher of anatomy can testify that those who can put on the best appearance at the College are the most likely to succeed. When we consider the nature of the examinations and the constitution of the Board of Examiners at the College of Surgeons, it is not difficult to account for these things. Not only is the time allotted to each candidate quite inadequate, but the tests themselves are wanting in uniformity and appropriateness. A spirit of indifference and recklessness has been engendered in students; and professional grinding, which has made now its way in its most objectionable forms into the medical schools, has been encouraged. The quality of the instruction has also, with a few honourable exceptions, gradually deteriorated and sunk to the level of the knowledge of the examiners, most of whom have taken no part in the practical teaching of anatomy or physiology for many years, if at all, and retain only the crude notions of their early years, uninformed, or, what is worse, misinformed concerning later acquisitions and recent advancements. The examinations at the College of Surgeons are acknowledged on all hands to be, as far as the educational purposes and tests of knowledge are concerned, monstrous

failures, if not actual impositions. We could at the present moment state at least a dozen instances in which within the last two years students thoroughly trained and well educated, of high culture, and great distinction as prizemen and honourmen at the various schools and colleges in the United Kingdom, have been rejected at the College of Surgeons, while the veriest pretenders have passed creditably. Yet it is this system, from which such results may arise, that Mr. MARSHALL would use for the improvement of medical education. It is greatly to be regretted that a teacher and examiner of Mr. MARSHALL'S position and influence should not have attempted some radical reform, instead of endeavouring to patch up a system that is old and rotten, and must sooner or later inevitably succumb to the force of enlightenment and progress. Mr. MARSHALL proposes to remedy the evils that have been produced as a direct result of the pernicious regulations of the College and of the faulty system of examinations by extending the operation of the morbific influences. He would hold what he terms short elementary examinations in anatomy, the examination consisting of two parts, a written and a *viva voce*. In the written examination two hours or less would be allotted to the answering of four questions, while the *viva voce* would not extend at most over more than fifteen minutes, and it might be considerably less. This would surely be playing at examination. No good could possibly come of such an imperfect test, even if it were not destructive of all previous study. If an elementary examination were instituted, its standard could not be made higher than that attainable by dull students, for, if it were, it would be unjust, and if it were not, it would only thwart the efforts of the quicker and more intelligent students. The evils of the levelling-down system would therefore be greatly multiplied. But there is another fallacy by which Mr. MARSHALL'S scheme is marred. It assumes that the knowledge of the first-year's students is complete. The fact is that the first year's instruction at the best schools is preliminary to that of the second year, and the knowledge of the student is, as it were, embryonal, and should be regarded as merely an early developmental stage of a subsequent complete knowledge. But even if the knowledge be complete as far as it goes, it is, in the vast majority of cases, confined to so small an area that it would be impossible for the student to present himself even at an elementary examination on the anatomy of more than a very small portion of the human body. If the average student were to present himself for such an examination as Mr. MARSHALL suggests, it is certain that he must have hurried over his work in a manner altogether inconsistent with any accurate and sound knowledge. For the first two months of his career the student flounders in the elements of the subjects of study, and has to acquire a vocabulary of technical and scientific terms. At least one clear month must be given to the study of osteology and histology, without a knowledge of which no progress can be made in either anatomy or physiology. But even when these difficulties are overcome, others present themselves. The supply of bodies is so scanty and irregular that in large schools two or three months elapse before each student can be supplied with even one part for dissection. Let us take an example by no means unique. To a large anatomical class numbering nearly two hundred students, twelve bodies have been supplied by the Inspector of Anatomy since the commencement of October. Now, as twelve bodies will furnish parts to only about one hundred men, it follows that long before the second hundred can be supplied with parts, the first hundred have finished their work, and are compelled to remain idle, as far as dissection is concerned. It is, therefore, impossible for the majority of first-year's students to get through the dissection of the limbs before the termination of the first winter session, unless means are adopted for securing a large and regular supply of subjects to the large schools. Where there are about one hundred new students, twenty-five bodies will be required to commence with—that is, four students to each body; and as each student will be required to dissect an upper and a lower limb, it follows that in the course of the winter session at least fifty subjects will be required for the first-year's students alone, over and above the bodies required for the purposes of instruction and demonstration and for the second and third year's students preparing for the first professional examinations at the College of Surgeons and elsewhere. Unless the Inspector of Anatomy can undertake to supply at least five or six hundred subjects to the medical schools in one session, it is manifest that Mr. MARSHALL'S proposal is quite impracticable, and if insisted on will lead to a cramming of anatomy from books instead of patient working at dissection.

A FEW weeks only have elapsed since we called attention to some very interesting and important researches by Dr. KLEIN on the Lymphatics of the Lungs having a direct bearing on the process of acute miliary tuberculosis; and we have now to place before our readers the results of an equally elaborate investigation by the same indefatigable observer on the Small-pox of Sheep, a disease that very closely resembles variola in man, and a knowledge of which will undoubtedly materially elucidate our conceptions of the exanthemata generally, showing, as these observations appear to do, that variola, at least, is due to the development of a special form of fungus. The lymph was obtained from Professor CHAUVEAU, and inoculation was practised in the skin of the groin on the 8th of December, 1873. On the 13th most of the punctures were surrounded by a raised red areola; these gradually increased in size till the 15th, when they became depressed and pale in the centre. The temperature of the animals rose at first slowly, then rapidly, but fell when the pocks ceased to increase in size. The pocks were excised at various stages, and immersed for a few days in very weak ($\frac{1}{2}$ per cent.) solution of chromic acid.

Careful examination of the lymph showed the presence of—1. Minute highly refractive spheres, isolated, or in couples, or in small groups; they correspond to the micrococci of COHN, and exhibit Brownian movements. 2. Decolourised blood-corpuscles. 3. A few rod-like bacteria, of the types termed by COHN "termo" and "subtilis." 4. Lumps of a pale transparent substance, with irregularly distributed larger and smaller granules. 5. Several forms of spheres, some larger than the decolourised blood-corpuscles, some smaller. If the lymph be placed in an

incubator for twenty-four hours, the pale transparent masses above alluded to become more or less distinctly fibrillar, and appear to consist of a feltwork of very delicate branched filaments, in or on which the highly refractive granules are found, and these in the course of another twenty-four hours become enlarged into the spheres of various size. It is worthy of notice that the few rod-like bacteria disappeared completely after the preparation had been kept in the incubator for twenty-four hours or more. The refractive granules, when small, are of a slightly greenish colour, and proliferate with extraordinary rapidity by transverse fission, forming necklaces, of which the micrococci constitute the beads and a transparent connecting substance the thread. When these necklaces become closely packed, they constitute a *colony* or *zooglœa* of COHN.

On making sections of primary pocks which had only appeared for from six to twelve hours, the characteristic points observed were that the epidermis had undergone considerable increase in thickness, owing chiefly to the swelling of the cells of the rete mucosum. The papillæ of the corium had also become broader and longer. The blood-vessels were distended, the endothelial cells being swollen, distinctly granular, and containing enlarged nuclei. The tissue of the corium, in general, was slightly œdematous, and the lymph-canalicular system larger and more clearly visible; colourless blood-corpuscles had made their way out of the vessels. The general appearances were therefore those of slight inflammation.

Pocks that had existed for twenty-four hours presented all these characters in a more marked condition. The cells of the rete Malpighii had undergone division, and the infiltration of the corium with lymph-corpuscles had greatly increased. In addition, the interfascicular or lymph-canalicular spaces contained a firmly granular material, in which were embedded peculiar ovoid or spherical sharply-outlined structures, containing in a clear substance one large, or two, three, or four small highly refractive bodies. Dr. KLEIN proceeds to contrast these with connective-tissue corpuscles and their nuclei, with pus- and lymph-cells; and shows that by the difference of their microscopical characters and reactions they must be regarded as bodies foreign to the structure of the skin, and, in fact, that they may be regarded as a *fungus*. Many of the lymphatics contained a material composed of a transparent matrix, in which were embedded highly refractive granules; and a few hours later the granules were seen to be arranged in shorter or longer, branched or unbranched filaments. When forty-eight hours had elapsed the granules were found not only to have arranged themselves into filaments, but the filaments had more or less lost their granular aspect, and had become smooth, longer, more branched, highly refractive, and slightly greenish. The mycelium thus formed then fructifies, forming conidia, like an *oidium*. In the earlier stages of the disease it is most abundant in the deeper stratum of the corium; but subsequently it appears in the superficial stratum and in the superficial stratum of the subcutaneous tissue, from which it may be traced for long distances through the lymphatics.

Further observations showed how it comes to pass that the central part of the pock is depressed and pale as regards the peripheral portion. It becomes depressed because a great number of layers of the original rete Malpighii undergo conversion into layers of horny scales, while the deep stratum of the rete grows very actively into the corium; and it becomes pale because the central portion is covered with a thick, horny, dry membrane, formed by the condensed layers of the rete.

Lastly, Dr. KLEIN gives the results of his examination of the pustular stage of the development of the primary pustules; and states that pustulation commences by the formation of isolated vesicles in the rete Malpighii, which, as they gradually increase in number and size, become eventually fused together to form larger cavities and canals. The formation of the vesicular cavities invariably depends on the transformation of individual epithelium cells of the middle layer of the rete Malpighii into spherical or elliptical vesicular structures, possessing a thick membrane and clear contents. As they increase in size the contents come to consist partly of lymph-corpuscles, but principally of mycelium, which may or may not be in fructification. Many of the lymph-corpuscles themselves contain a number of spherical bodies of greenish colour, which appear to be spores.

It would seem from all this that we are now in possession of substantial evidence that variola, if not caused, is at least accompanied, in the sheep, by the growth and development of a peculiar fungus which makes its appearance in the tissue of the corium and its lymphatics, and is gradually carried or penetrates into the vesicles formed in the rete Malpighii. This fungus, Dr. KLEIN proposes, since he has been unable to identify it with any described species, to call the "oidium variolæ"; and adds that it is a very important question, and one deserving alike the attention of physicians and anatomists, whether any form of vegetation corresponding to it is to be met with in the cow-pox or in human small-pox.

Dr. KLEIN'S researches appear in the just issued part of the Philosophical Transactions, and have been communicated by Mr. SIMON, at whose instigation they were made. They are illustrated by most beautifully executed plates.

A VERY proper attempt has been made to pass a Medical Bill through the Parliament of New South Wales. The Bill was a very reasonable one, erring, if anything—especially in the amendments agreed to by its able promoter, Sir ALFRED STEPHEN,—in too liberal concessions made to those weaker brethren, always forthcoming in legislative assemblies, who think it their duty, in the interest of truth and liberty and other exalted principles, to legislate with a special favour to every conceivable crotchet and quack in medicine. Sir ALFRED'S Bill was conceived in the spirit of a professional man and based on the English Medical Bill. That is to say, it forbad the false use of titles, and gave power of recovering in Courts only to such persons as held diplomas or degrees approved by a Medical Council which it provided. It enacted also that no one should be disqualified or refused qualification merely on the ground of peculiarity of medical opinion or theory, so long as his knowledge of medical facts and the sciences fundamental to medicine was ascertained to be satisfactory. Unlicensed

practitioners were by one of the amendments specifically exempted from punishment, provided that they put "unlicensed" at the end of any title they used—not definitely forbidden—to indicate that they professed to cure disease.

Such was the moderate Bill by which enlightened men in New South Wales, in the interest of the public, tried to encourage medical education, and give a certain legal recognition to those who had given evidence of possessing it. We are sorry to say that the promoters of the Bill have been defeated, and still more sorry to add that their principal opponent was Dr. SMITH, the Dean of the Medical Faculty of the University of Sydney. It is no part of our wish to intensify the acrimony which Dr. SMITH's conduct in this matter has occasioned. We readily give him credit for not intending to speak disparagingly of the profession or of medical education. Much that he said about the existence of incompetent medical men who had gone through a curriculum and passed the examining boards was of course true. Everybody admits it. But for him to extract an argument out of such a fact against a Medical Bill favouring medical education, and examinations to test it, was an inconsistency which we deeply lament. There are plenty of ignorant people to point out the imperfections of our system of medical education, and to misconstrue the lessons of it, without a Dean of the Medical Faculty coming to help them. Dr. SMITH must know that the only remedy to be relied on for incompetence in the profession is a better education of medical men and a more stringent examination. And these ends can only be secured by some such Bill as that of which he has been the main and too successful opponent. At the time such a Bill as that in question was being discussed he that was not for it heartily was practically against the whole cause of medical science and education.

We can only hope that ere long Sir ALFRED STEPHEN will reintroduce his Bill, and will have Dr. SMITH among his supporters. It is appalling to think what may be the consequences in a colony like New South Wales of leaving everybody that likes to call himself doctor, surgeon, physician, or any other title by which simple people can be misled. If the ignorance of men who have gone through some sort of a medical education is so mischievous, how much more injurious must be the ignorance of those who have had no such chance of being informed. It is really the public that will suffer. Educated medical men may well feel chagrined when a civilised community, led by a Dean of the Medical Faculty, refuses them any special advantage or recognition. But they can provide for themselves. It is the public that will pay the penalty.

MAJOR BOLTON, water examiner, reports that in many of the complaints received by the Local Government Board as to the quality of the water delivered by the metropolitan water companies for domestic purposes, examination has revealed the cause of the alleged contamination to be a dirty state of the cisterns on the premises of the complainants. Major Bolton urges the importance of the frequent and thorough cleansing of all cisterns, and he again points out the danger of gases flowing back into the cisterns, and becoming absorbed by the water, unless the overflow-pipe is brought outside the house, and the end left exposed to the air. We trust that householders generally will practise the excellent instructions given them by the water examiner.

Annotations.

"Ne quid nimis."

THE MEDICAL OFFICERS OF HEALTH OF COMBINED SANITARY DISTRICTS.

THE medical officers of health of combined sanitary districts are beginning to understand more clearly the very anomalous position in which they have been placed by the Local Government Board's administration of the Sanitary Acts upon Poor-law traditions and principles. They find themselves suspended, like a Mahomet's coffin, between a presumed central departmental heaven and an assumed local authority hades, repelled by both alike. It must be confessed that they, in their blind advocacy of the earlier administrative measures of the Local Government Board, and their voluntary and willing acceptance of a position wanting in professional respect, whether as related to the central or to the local authority, have contributed much to the present state of things. But it is astonishing how imperfectly they even now apprehend their true position. They are indignant at having been told in effect by the Local Government Board, in their recent interview with the President, that "as they had made their bed so they must lie upon it," such answer only being possible so long as the present administrative policy of the Board is pursued. They have been made the "cat's-paw" of the Board in its policy of aggrandising the power of its Poor-law elements of administration, and have been thrust to the wall precisely as the Board's own Medical Department has been. Indeed, they have been astutely used in helping to bring about the depreciation of medicine at head-quarters, not seeing that the attitude of the Board in this respect must govern its attitude in a like respect with local authorities. They have been encouraged not to content themselves with administering existing law to the best of their power, but freely to criticise this irrespective of their immature experience, thus exposing themselves alike to discredit from the central and local authorities, and justifying in a fashion most detrimental to themselves the cry against being doctor-ridden. Until medical officers of health take a professional as well as an individual view of their position, they must remain, as they are now, isolated and helpless each in his own district. When they have come to understand that there is a professional as well as an individual aspect of the question, they may carry the whole profession and the public with them, and it will go hard if the present derogatory position which they hold, both with reference to the Local Government Board and the local authorities, is not amended.

METROPOLITAN WEEKLY RETURNS OF MORTALITY.

IT is now rather more than twelve months since the Registrar-General ceased to furnish gratuitous weekly returns of mortality to the metropolitan officers of health after repeated futile efforts to obtain from the sanitary authorities some remuneration for the registrars for copying these returns. This step was the result of representations from the London registrars, that by allowing a gratuitous secondary use to be made of returns furnished for official purposes, they were deprived of fees, for making such returns, enjoyed by registrars in all other parts of England and Wales, and which had been sanctioned by Act of Parliament. Attention has recently been again drawn to this subject by Dr. Gibbon, the medical officer of health for Holborn, in some remarks at the opening of his report upon the sanitary condition of Holborn for the year ending Lady-day, 1875. These remarks appear to us, at the present

time, most ill-judged, both because, the matter being now settled, no good can result from further attempts to make justice to the registrars appear, like a grievance to sanitary authorities, and because the least said about the fact that the Holborn sanitary authority, by refusing to pay the paltry sum of less than £15 per annum to three registrars, has deprived their medical officer of health of the use of these weekly returns, the better for the credit of the Holborn District Board. Holborn enjoys the unenviable notoriety of furnishing the largest contingent of fever cases to the Metropolitan Asylums Board fever hospitals, and can therefore ill afford to neglect any of those precautions which are deemed essential by other sanitary authorities and other medical officers of health. There appeared to us no necessity for medical officers of health to take part in the dispute between the Registrar-General and the sanitary authorities of the metropolis, but it might fairly have been expected that their interest would have been used in favour of the new system of returns, which renders them available for use on each Monday morning, instead of the old system under which they did not come to hand until Thursday morning. We are informed that some at least of the Holborn registrars have regularly furnished Dr. Gibbon with *gratuitous* information of cases of infectious diseases, but this is not acknowledged in his report.

We may take this opportunity of stating that Holborn is not the only metropolitan sanitary authority which still refuses to pay for these weekly mortality returns, and thus places their medical officers of health at a disadvantage in fighting zymotic disease, more especially during the present epidemic of scarlet fever. No weekly returns are yet furnished in St. George's (Hanover-square), Clerkenwell, Bethnal-green, Whitechapel, or Mile-end Old Town; we are, moreover, informed that in Shoreditch the vestry now demurs to pay for returns which the local registrars have been furnishing for more than six months under promise of payment. The other thirty-two of the thirty-nine vestries or district boards, constituting the metropolitan sanitary authorities, have long since made more or less satisfactory arrangements for the furnishing of these returns to their medical officers of health. We trust that the medical officers of health of the above-mentioned seven defaulting authorities will lose no opportunity to urge the inconvenience and danger to the public health arising from the neglect of this well-defined responsibility.

THE PRIVATE DISPENSARY SYSTEM.

THIS system was the subject of a very full and critical discussion at the meeting of the Islington Medical Society on Tuesday, held at the residence of N. H. Clifton, Esq., who presided. The interest in the question seemed the greater inasmuch as the system has had a considerable development in Islington. The universal feeling was that to pretend to doctor people for one shilling a week was to degrade the profession and to mislead, if not to defraud, the public. Some striking instances were given of the neglect of and imperfect examination of patients under such a system, such as a case of large pulmonary cavities and a case of urgent empyema, in which the chest had never been examined. Such cases seem to show, what one might *a priori* conclude, that private dispensaries are capital places for not having your diseases detected. Striking illustrations were also adduced showing the improper way in which the system was applied to those who can pay ordinary charges. One case was mentioned that used to receive treatment for a shilling a week, and afterwards came under the care of a regular practitioner, who was paid £15 for three months' attendance. It is only fair to add that the members generally expressed much interest in the difficult question of attending the poor medically and not charitably. Mr. Brown, of the Islington Provident Dispensary, expressed natural disappointment at the limited acceptance which such institutions had met with at the hands of the working classes. After ten years' existence, two medical men, who devoted three or four hours a day to the work, divided only about £100 a year between them in this institution. The discussion was adjourned to next meeting.

DR. WEBSTER.

A FEW weeks ago we announced that arrangements were being made by the inhabitants of Dulwich to erect a memorial to Dr. George Webster, who for the long period of sixty years resided amongst them, and we at the time gave expression to a hope that his honoured life might be yet spared to accomplish fresh deeds of usefulness and charity. It is with feelings of profound pain and regret that we now learn of his sudden death—struck down while apparently in the enjoyment of a vigorous old age, although it had already exceeded the period allotted by the Psalmist. On Saturday evening, the 12th inst., Dr. Webster entertained a few friends at his house, no one appearing in better health and spirits than the worthy host himself. On the following morning his servant found him lying senseless in his room with an apoplectic seizure. All that medical science, aided by assiduous love and care, could suggest proved unavailing. He never recovered consciousness, but passed away, bequeathing in his death a bright example and an unsullied name.

Dr. Webster was a Scotchman by birth, and came of a very ancient family in Forfarshire. At fifteen years of age he entered the University of Edinburgh as a medical student, and only three years later obtained the diploma of L.R.C.S. Young Webster immediately secured an appointment as army surgeon, and narrowly escaped being present with our troops at Waterloo. Peace stopped his career in this direction, and at the close of that memorable year (1815) he made his way to the village of Dulwich, and became a partner of Mr. Hall, the resident practitioner. Dulwich he never quitted. He found time amidst the cares of a large general practice to contribute several sound practical papers to the literature of medicine. Many of his professional brethren will remember him as the promoter of the British Medical Association, of which he was the first president.

He always displayed a keen interest in public affairs, and, in addition to being a prominent guardian and vestryman, was intimately associated with various institutions for the education and general amelioration of the youthful poor; notably he was well known as Chairman of the South Metropolitan Schools. In 1829 he obtained the M.D. Aberdeen. He was also F.R.G.S., and J.P. for the county of Surrey. The loss of Dr. Webster will be felt far and wide in the south of London, but by none more than by the poor.

ENTERIC FEVER AT CROYDON.

EIGHT deaths from enteric fever occurred at Croydon during the week ending Saturday, November 20th. These, with the deaths previously registered, make a total of eighty since the commencement of the epidemic. Last Friday a deputation of residents of Croydon, introduced by Mr. Grantham, M.P., waited on Mr. Sclater-Booth at Gwydyr House to ask for the appointment of an inspector to inquire into the causes that led to the outbreak. Dr. Chambers especially insisted on the necessity of at once ascertaining the causes of the present epidemic, so that an effective remedy might be applied without loss of time. No serious steps, he said, had been taken by the Local Board of Health to make the necessary investigations, and their

measures had been confined as yet to frequent flushings and disinfecting of the sewers, in issuing instructions for domestic use, and commencing a house-to-house visitation. Mr. Sclater-Booth regretted he could not give a definite reply to their request. He had that morning received an elaborate report from the Local Board of Health at Croydon in answer to the official and authoritative inquiries made by his office. The report in question contained a document expressing, on the part of a number of gentlemen residing in the neighbourhood, perfect confidence in their medical officer, Dr. Philpot. In our article last week we bore testimony to that gentleman's valuable report, and fully endorsed the opinions expressed by him in it. We also urged the local authority to adopt without delay the chief recommendation it contained—to institute at once a searching inquiry into the immediate cause of the outbreak. This was the point urged by Dr. Chambers and the other members of the deputation upon Mr. Sclater-Booth, and we are anxious to learn what steps the local authority have taken to carry out the recommendation of their medical officer. Whatever may be the cause, it certainly is not due to any casual contamination of the water, but to some deeper and more extended sanitary defect. Last week we conjectured that this defect would most probably be found to lie in the faulty condition of the mains and sewers, and nothing has as yet transpired to make us alter the opinion we then expressed. Certainly the condition of the mains and sewers ought to be one of the first points to be inquired into.

BUYING AND SELLING PRACTICES.

THERE is nothing with which doctors are more frequently twitted than their differences, though it is doubtful whether they differ more than other men who have to deal with difficult questions. There is one thing, however, about which any two doctors are almost sure to differ. The thing we refer to is the value of a practice that has been sold; the two doctors are respectively the buyer and the seller of the practice transferred. As a rule they have the most diverse views on the question. The difference is likely to be still greater in the event of the seller removing to but a short distance from the place he is leaving. The particulars of a case in illustration are before us. They were elicited in the course of an action in equity in the County Court at Stone before the judge, W. Spooner, Esq. The plaintiff was Mr. Theodore Edgar Dickson Byrne, surgeon, of Newcastle-under-Lyne, and the defendant Mr. Daniel George Astley, surgeon, Beech Cliff, Trentham. Not unnaturally, the report of the trial is headed "Extraordinary Disagreement between Medical Men." We need not go into the details, as the case finally terminated in an amicable arrangement between the parties to the following effect:—"The agreement to be annulled. The defendant to return £100 in discharge of all claims and costs. Each party to be unlimited as to area of practice. All imputations to be withdrawn." We share with the judge satisfaction at the "happy conciliation attained." At the same time the case seems to point two morals: one, to purchasers, not to be too careless in investigating for themselves the real facts of a practice—in legal language, *caveat emptor*; the other to sellers, not to colour too highly the representations of the value of the practice to be sold. It is, to say the least, an undignified thing to have one's own witness in such a case admit that the average value of midwifery cases was overstated, and to have, as a result of the conciliatory arrangement, to return part of the payment. It is reasonable that men who have created practices should sell them when they see fit to do so; but the terms and the representations should be so conspicuously just as to make a complaint in the law courts hopeless.

WARMED RAILWAY CARRIAGES.

AMONG the diseases easily preventable by better social contrivances must certainly be reckoned a large number of those which result from the external application of cold. How many lives might be saved every winter had we better organised arrangements for the protection of invalids from cold during travelling! The discomfort of railway journeys at this time of the year is not only annoying, but to many the exposure is a source of positive harm. Hot-water tins are the only means of maintaining the temperature, and they can act only on a small part of the body, and scarcely at all on the air respired. On many lines of railway, even, as appeared from a letter to a contemporary, on some main lines which derive so large an income from the conveyance of invalids as the South Western, hot-water tins are not always to be obtained even at a terminus. On some parts of the Continent the arrangements for warming the carriages are much more efficient. The composition of the train, consisting of saloon carriages connected with one another, renders it possible to heat them properly and pleasantly with warm air, and thus a journey in mid-winter is robbed of half its discomfort and danger. Such a system would probably not be practicable with our present small compartments. It would be impossible to regulate the temperature and fresh air in an efficient manner, and an alternation of baking heat and freezing draught would be the only result. But the need for warmed carriages is very great, and should constitute another motive for the supply of better constructed railway carriages in which such safe and effective warmth might be possible.

THE HEALTH OF ETON.

THE answer the Rev. Charles Wooley Dod was able to give in *The Times* last Monday to the letter of "A Father" on the health of Eton, which appeared the preceding Saturday, must be considered eminently satisfactory; and there can be no doubt that the uneasy feeling excited by the ill-advised communication in question has been allayed by Mr. Dod's straightforward statement. Our Sanitary Commission have had occasion to visit Eton twice within the last eighteen months; on the first to report on the new system of sewerage and drainage which had recently been completed, and on the second to collect materials for our Reports on the Sanitary Condition of our Public Schools. On both occasions the drainage question was a subject of particular inquiry, and we are pleased to be able to state that the system adopted is working well, and that there is no possibility of the sewage being choked back by the floods or otherwise. Eton, from its low-lying situation, has always been subject to floods. In 1852, as we are informed by Mr. Dod, the water rose eight feet six inches above the ordinary summer level—the highest flood recorded for forty years; since that time recent arterial works on the Thames have reduced the flood level nearly two feet, a most important fact with reference to the drainage of towns in or near the Thames valley. In this year of extraordinary floods, the highest level reached has been seven feet nine inches, or seven inches below the highest flood level recorded for forty years. If typhoid fever should be introduced into Eton, the possibility of its spreading would not be through the medium of the sewers, but by the water-supply. The chance of the water-supply becoming contaminated, however, has been reduced to a minimum since the old cesspools have been done away. There are many points of detail no doubt connected with the sanitary arrangements of the school that call for improvement, as is the case in nearly every school we have yet visited, but the authorities must be acquitted of the charge of neglect and indifference

to sanitary matters; the fact that an extensive drainage scheme on the separate system has been satisfactorily carried out is a proof to the contrary. To place Eton in the same category as Uppingham shows the profoundest ignorance of the first principles of sanitary science.

IMMUNITY FROM SMALL-POX IN LONDON.

IN his last Weekly Return the Registrar-General calls attention to the recent remarkable immunity from fatal cases of small-pox which has been enjoyed by the 3,445,160 persons now estimated to be residing within registration London. It appears that since the week ending July 17th last, more than four months, no death in London has been referred to small-pox, whereas the corrected average number in the corresponding period of eighteen weeks in the ten years 1865–74 was no less than 337. This period, however, includes the remarkable epidemic of 1871-2. Since the beginning of the year 47 deaths from small-pox have been registered in London, of which 31 occurred in the first and 15 in the second quarters of the year, and the last case, as before mentioned, during the week ending July 17th. Since this date the 16 deaths which have been attributed to small-pox in London in the Registrar-General's Weekly Return have all been fatal cases of varicella or chicken-pox. The last Quarterly Return of the Registrar-General showed that the fatality of small-pox was unprecedentedly low throughout England and Wales during the three months ending September, and the remarkable freedom from a fatal case in London during more than four months is certainly without precedent since civil registration was established in 1837. It will be somewhat interesting to observe how these facts will be twisted by the ingenuity of the anti-vaccination leaders to support their case against compulsory vaccination.

THE KEIGHLEY GUARDIANS AND THE MANDAMUS.

THE guardians of the Keighley Union are making a very sorry and ridiculous exhibition of themselves before the country. They have prepared and forwarded the following return to the writ of *mandamus* issued against them by the Court of Queen's Bench:—

"We, the guardians of the Keighley Union, to whom this writ is directed, do most humbly certify and return to our Sovereign Lady the Queen—1st. That the said writ cannot be obeyed without serious damage to the health of the inhabitants of the Keighley vaccination district of the Keighley Union, and without increasing mortality among young children; it being the fact that, notwithstanding the adoption of all modern sanitary improvements, infant death has been increased by enforcing the Vaccination Act in large towns. 2nd. That the Local Government Board have power to direct the vaccination officers to prosecute persons omitting to obey the Vaccination Acts; consequently, it is not necessary to require the guardians to do so. Under the circumstances herein appearing, they humbly submit that they ought not to be compelled to do so."

We will leave the Court of Queen's Bench to say what is the force of this answer regarded from a legal point of view. As we have already said, the interest of the case between the guardians and the Court largely supersedes the interest of the abstract question of the wisdom or otherwise of compulsory vaccination. We will only say that, from a medical point of view, the main part of the answer is as erroneous as it can be. If a reasonable time be taken into account, it will appear that the application of the compulsory Vaccination Acts has immensely reduced the mortality of young children. Small-pox occurring in unvaccinated children kills 40 or 50 per cent. of them; whereas few practitioners could be found who have seen such a thing as a child's death from vaccination, either direct or remotely.

It is only proper to say that the above answer to the *mandamus* was the work of only six guardians, four others present opposing it. Amongst the dissentients, Mr. Redman deserves praise for the words of sense which he spoke. He very forcibly referred to the snubbing which the Keighley guardians have received from other boards. Not content with not obeying the law themselves, they have tried to incite other boards to disobedience; and they seem signally to have failed. At the end of the same meeting at which the return to the *mandamus* was settled, answers to the overtures of the Keighley guardians from three boards were read, which may be taken as specimens of others. The Hexham Union stated that they could not concur with the Keighley guardians in presenting a petition for the abolition of vaccination. Romley Marsh Union declined to interfere. The Leicester guardians had resolved, "That this board, having no sympathy with the views expressed in the memorial of the Keighley guardians, declines to take any part in supporting them in their resistance of the law."

It is to be hoped that the Keighley guardians will begin to see that they are not taken for great lights by other boards, and the sooner they exchange the work of teaching for that of learning the better it will be for their reputation.

CHLORAL.

THE uncertainty of the action of chloral, however rare, is an undoubted fact which lessens very much the safety of the drug. Some time ago we expressed the opinion that unexplained death after chloral was more common than after any other of the narcotics in common use. Two cases reported in the daily papers since our last issue afford fresh support to this belief. In one case a medical assistant, on whom an inquest was held at University College Hospital, was in the habit of taking hydrate of chloral to induce sleep. He was found in the street dying, as if from the influence of some narcotic poison, and when brought to the hospital was actually dead. In the other case a lady, said to have been subject to epileptic fits, had a small dose of chloral (ten grains) administered to her, and was found the next morning lying on her face, and dead. Death after an epileptic fit from accidental suffocation is not uncommon, and it is very possible that it was in this way that it happened. But if a fit occurred during the night it does not appear to have been sufficient to rouse the husband of the lady who was sleeping by her. The habitual dose of chloral cannot be acquitted (in the absence of any direct evidence of a fit) of having contributed to the fatal result. Each case points the lesson very strongly that the nocturnal use of chloral is not without its dangers, and should, as much as possible, be discouraged.

DR. WARD.

WE regret to have to announce the decease of Dr. S. M. Ward, of Chobham, which took place on the 16th instant. He was the youngest son of the Rev. Canon Ward, formerly Rector of Meesden, Hertfordshire; was educated at Tunbridge School, whence he proceeded to Caius College, Cambridge, in 1854, having obtained a Tancred Studentship in Medicine. He graduated as B.A. in 1858, and afterwards as M.B., having previously been elected a Scholar of his College. He completed his medical education at St. Bartholomew's Hospital, and succeeded to the practice of the late John Langdon, Esq. Dr. Ward was an accomplished physician, and successfully worked a very large practice, which embraced nearly all grades of society, from the highest to the lowest. The Poor-law appointment which he held brought him in daily contact with the poorer population of his district, with whom he had endeared himself by his kindly and generous qualities. These must feel his loss acutely. Dr. Ward leaves a widow and eight children.

REPRESENTATION UNDER THE ARTISANS' DWELLINGS ACT IN BRISTOL.

LAST week we urged that the recent excessive fatality of scarlet fever in certain of the crowded portions of the city of Bristol, in which high death-rates generally prevail, could not safely be disregarded as evidence that the city contains "unhealthy areas" which should be dealt with under the Artisans' Dwellings Act. On the same day that we went to press a meeting of the Sanitary Committee of the Bristol Town Council was held, to receive an important representation from Mr. David Davies, their medical officer of health, describing "all the area subject to inundations of the river Froom, lying within the city of Bristol, as an unhealthy area, and all the houses within such area as permanently unfit for human habitation until such means have been adopted as to preclude any inundation of such area by the waters of the river Froom." This is undoubtedly a bold and novel application of the powers conferred upon medical officers of health and local sanitary authorities by the Artisans' Dwellings Act, but if the facts asserted by Mr. David Davies in his report are substantiated by further investigation, we cannot see what is to prevent the provisions of the Act from being put in force to redress a great evil. Hitherto it has only been sought to apply the Act to clear away, by means of an improvement scheme, the crowded and squalid courts and alleys of our large towns. This considerable area in Bristol, though covered with new houses, is not only continually subject to floods, but the houses and drains are constructed of bricks that can be crumbled between the fingers. Some of the houses are, moreover, so unsound that the walls are only kept from falling by iron straps. This revelation is a singular commentary upon the nature of the local bye-laws relating to building in Bristol, or upon the way in which they are carried out. It was decided that a special meeting of the committee, to consider the representation of their medical officer, should be held as soon as sufficient information had been obtained to enable them to arrive at a decision. A strong *prima facie* case has in the meantime been established that the houses on this area are "unfit for habitation" within the meaning of the Artisans' Dwellings Act.

A RECENT INQUEST.

OUR attention has been directed to the report of an inquest held at Lowestoft by the deputy coroner of the district, which affords a very good proof, if any were wanting, that none but properly qualified (in the broadest sense) medical men should hold the office of coroner. The facts are briefly as follows. A fine healthy infant of fifty-two days old gets eight drops of "Godfrey's cordial," is soon after suckled by its mother, and shortly after this vomits and dies in about four hours. The eight drops of the cordial were administered to the infant at 11 P.M. The child slept in the same bed as the parents; the mother took the child into bed with her, and all soon fell asleep. About 10 minutes to 3 A.M. the father was awakened by his wife, and discovered the infant dead by its mother's side. The child had always slept on the mother's arm, but on the night in question her arm was above it. The bottle containing the remainder of the drops was produced at the inquest. The chemist who both made and supplied the "cordial," and was responsible for the doses named on the label of the bottle, gave evidence as to the ingredients of which it was composed, and swore that it contained exactly one minim of tincture of opium in thirty-two minims of the "cordial." The evidence, as we have said, gives eight drops as the dose taken. This will equal one-fourth of a drop of laudanum, or about one fifty-sixth of a grain of opium. The druggist declared in his evidence that he sold one hundred pennyworths of the cordial in a week, and that he had never known a fatal case to arise from using it. Dr. Ringland, who had been called in to see the infant, attributed its death, without the slightest doubt, to an overdose of opium; and, in reply to a question from a juror as to how this opinion could be reconciled with the fact that the druggist had for years sold upwards of one hundred pennyworths of the cordial without the occurrence of a fatal case, stated that the very healthiness of the child in question would make the administration of opium to it the more dangerous. The jury returned a verdict in accordance with the coroner's charge—viz., that the child died from an overdose of opium ignorantly administered, and the coroner, after expressing his concurrence with that verdict and passing an encomium on Dr. Ringland for his excellent evidence, declared that if a death should result from such causes in future, he should be under the painful necessity of directing the jury to return a verdict of manslaughter.

It is almost a platitude to say that the administration of opium to infants of tender age requires extreme care, and should certainly only be done under the advice of some medical man after having seen the case. The use of opiates for infants under the name of Godfrey's Cordial, or in any other form, is unquestionably a very reprehensible practice, and we are utterly opposed to chemists and druggists taking upon themselves the very grave responsibility of prescribing such things on the application of parents for something to quiet a child. But what we have now to consider is the evidence and the verdict in this particular case. It seems to us far more probable that the death of the infant was caused by asphyxia from an overdose of the parents than from an overdose of opium. The infant was most probably suffocated by what is commonly termed being overlaid. While fully recognising the susceptibility of infants to the action of opium, yet the dose in this instance, according to the sworn testimony of the witnesses, was so minute—one-fourth of a drop of tincture of opium—that we cannot help thinking a coroner, if himself acquainted with the purely medical aspect of the question, would, at any rate, have striven to exclude all other causes of death before attributing it to the one in question.

ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

As mild cases of typhoid fever still continue to appear among the boys on this ship, and several relapses, a large steamboat was procured, and all the healthy boys were transferred to her on Saturday last. This vessel was sent down the river, and is now moored below Gravesend, near the hospital-ship *Rhin*. All the sick and convalescents are on board the latter vessel, and since this complete removal no cases have occurred. A thorough examination of the ship has been made, and it is probable that she will undergo a further inspection in dry dock. The question of moving the ship to another position in the Thames is still undecided.

SANITARY NOTES.

THE solicitor of the Board of Trade conducted a prosecution on the 17th instant against the master of the ship *Sarah Sneed*, the charges being that no lime-juice was given out during the entire voyage to and from Lagos, and that no entry of illness of any of the crew was made in the official log. Several of the crew were seriously ill with West Coast fever, and one had also marked symptoms of scurvy, which appears to have exaggerated the ill effects of a wound of the leg, for which he is still under treatment at the Seamen's Hospital. Both offences were proved, and the legal penalties inflicted by

the presiding magistrate. This is the second prosecution conducted by the Board of Trade during the past month on account of scurvy and neglect of those clauses of the Merchant Shipping Act that relate to health of crews.

Mr. Ebenezer Davies, medical officer of health for the Port of Swansea, gives some interesting particulars as to work done during the past year, and records a glaring instance showing the necessity for port sanitary surveillance in view of preventing the spread of epidemic diseases. But the observations made as to cholera are altogether beside the question, as indicating a return to the old and useless restrictions of quarantine. If Mr. Davies will read carefully the order in Council of July 17th, 1873, with reference to cholera, he will find that, if properly administered, it affords a very sufficient provision against the importation of the disease.

THE HEALTH OF THE WAR MINISTER.

THERE is nothing like improving the occasion; and one of our provincial contemporaries, seeing, we presume, that Mr. Gathorne Hardy's name had been conspicuous for its absence from some cabinet meetings, and learning that the right honourable gentleman was ill, was neither at a loss for a name for the disease nor for the cause to which it might be attributed. Mr. Hardy was suffering from "War Office fever," and added another name to the list of officials who had been "knocked over" and obliged to absent themselves from that unhealthy building. The atmosphere of the War Office, by all accounts, is not that of a summer garden; but as Mr. Gathorne Hardy's late indisposition was ascribed to that common complaint a "cold in the head," we may acquit the War Office this time, and lay the charge to the weather. Any War Office fever from which Mr. Hardy may have been suffering was probably of another kind altogether, arising from the intricate and tangled mass of work before him. This was, no doubt, well calculated to induce lowness of spirits in the most Mark Tapley type of character. However, it will be gratifying to an army all anxious to see "what he will do with it" to be assured that the War Minister is very nearly "himself again," and will, we hope, shortly take his accustomed part at Cabinet Councils.

A SLIGHT DIFFERENCE.

TOUCHING some recent statistics of our contemporary, the *World*, as to the risks encountered by Europeans in India of contracting and perishing from cholera, it will be remembered that it was computed that there was one death out of thirty-seven Europeans attacked with that disease. Those acquainted with the terrible nature of the disease naturally raised the "eyebrows of astonishment" when they found it had been robbed of nearly all its terrors, and was, after all, a very mild kind of disease. Dr. Bryden's tables unfortunately tell a very different story, however. From these we learn that among European and native troops occupying the same stations during the invading epidemics of late years, the mortality of those treated for cholera has averaged 60·19 per cent. for the European and 43·02 per cent. for the native troops.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

ON the 20th inst. an election took place for a Vice-President of this College in the room of the late Mr. Hamilton, when Dr. George H. Kidd was appointed without opposition. A vacancy having occurred in the Council, three candidates competed—viz., John Cronyn, Thomas Darby, and Robert Persse White. The first two gentlemen each polled forty-two votes, the casting vote being given by the president in favour of Mr. Cronyn, who was thereby elected.

THE PUBLIC HEALTH OF ST. PETERSBURG

A RUSSIAN sanitary periodical, aptly and briefly entitled *Health*, publishes some statistics which conclusively demonstrate the unwholesome condition of St. Petersburg. Cholera, it is true, has not made its appearance this year, but a typhoid epidemic has continued its ravages notwithstanding the magnificent summer recently enjoyed on the banks of the Neva. With the advent of winter, the number of deaths has risen to nearly double the average chronicled during the summer months. This fatal increase is, however, the ordinary consequence of the rigorous climate, and will not be reduced again till the end of April, but the rate of mortality is higher than it should be all the year round, and this may be attributed to inadequate sanitary precautions, though the fact is not generally realised. The number of inhabitants has multiplied so rapidly that at first sight many persons might believe the increase of population to be a result simply of natural causes. M. Yélatchitch, secretary of the St. Petersburg Statistical Committee, has, however, issued a publication which clearly proves that this augmentation in the number of citizens is due to immigration, and not to the excess of births over deaths. When St. Petersburg was founded there were about 25,000 inhabitants gathered within its walls during the first few years of its existence. Subsequently, in 1750, the number rose to about 80,000. The first census was taken in 1764, and it estimates the population at 192,000. This number increased to 220,000 in 1800, 308,000 in 1812, 470,000 in 1840, and 522,000 in 1863. On the other hand, we find that the average annual number of births from 1764 to 1770 was 5122, while the deaths during the same period amounted to 4677; but from 1808 to 1813 we note a great change, for there were nearly 6000 more deaths than births during that period. Again, in 1848 no less than 31,707 deaths were registered, to correspond with 14,529 births. Altogether, and taking the whole century, there have been 1,095,451 deaths, and only 962,689 births, in St. Petersburg.

DECLINE OF THE SCARLET FEVER EPIDEMIC.

TRUE to the experience of previous epidemics, the fatal cases of scarlet fever showed a marked decline on the first appearance of winter temperature. In the eighteen large English towns furnishing weekly returns, and having an estimated population of nearly six millions and three-quarters, the deaths referred to scarlet fever in the third week of this month fell to 185, from 231 and 260 in the two preceding weeks. In London, the numbers in the three weeks ending the 20th inst. were successively 129, 116, and 96; and, excepting an increase in Nottingham and Salford, the fatality of the disease showed last week a general decline in all the large towns. The annual death-rate from the disease in the week ending 20th inst. was, however, equal to 1·5 per 1000 in London, 2·8 in Bradford, 3·5 in Salford, 4·3 in Bristol, and 4·5 in Nottingham.

SIR TREVOR LAWRENCE.

WE are glad to be able to announce the unopposed return of Sir J. J. Trevor Lawrence as the parliamentary representative of Mid-Surrey. As we have before stated, the new senator is a member of the medical profession, and formerly served his country in the medical department of the Indian Army. He was born in 1831, and in 1867 succeeded to the title, by the death of his father, Sir William Lawrence, F.R.S., Serjeant-Surgeon to the Queen. The small band of doctors in the House of Commons have received a welcome accession to their number. There are great questions now coming on before Parliament which cannot be properly discussed without the aid of medical men and sanitarians.

A HEALTHY YEAR IN INDIA.

DR. J. M. CUNINGHAM, the Sanitary Commissioner with the Government of India, reports that the sanitary history of 1873 presented a very marked contrast to that of 1872. In some parts of India small-pox was epidemic, and had caused much mortality among the people during several months; generally there was a remarkable absence of cholera, and a considerable diminution of other diseases compared with other years; cholera can only be said to have been epidemic over a small area, while its dormancy over certain large tracts of country and its almost complete absence from others had been very striking features. These remarks are borne out by the statistics of the European troops, who appear to have suffered little from any serious epidemic, and the year, as a whole, was an unusually healthy one.

UPPINGHAM SCHOOL.

WE are requested by Mr. Haviland, who is investigating the recent outbreak of enteric fever at the Uppingham School, to say that he will be much assisted in his inquiries if the medical attendants upon boys who have fallen ill shortly after leaving that school will kindly favour him with notes of the facts of illness and particularly of the date of the commencement of illness. Letters should be addressed to him at Northampton.

WE gather from a report of the sanitary condition of York, recently issued by Mr. S. W. North, that the health of the city is by no means good. The death-rate during the last quarter has been unusually high, and there was a great deal of sickness from diseases of the zymotic class. Many cases of enteric fever were reported, and on investigation it was ascertained that the sewerage and drainage of the localities of the outbreaks were defective. New sewers are now in course of construction, and other improvements are being carried out, which cannot fail to have a beneficial influence on the health and comfort of the inhabitants.

A BRIEF report of the health of Hastings during the last quarter has just been issued by Mr. C. Ashenden, medical officer of health. The death-rate during the period was 18 per 1000 annually, which is rather a higher figure than could be desired for a town with such great natural advantages. The borough was free from epidemics, although cases of zymotic disease were imported into the town. Mr. Ashenden thanks the urban sanitary authority for having provided a disinfecting apparatus and for sanctioning his appeal for a hospital for infectious diseases.

LAST week Dr. Inglis, late of Worcester and now of Cheltenham, was presented by the inhabitants of the former city with a testimonial in the form of a silver salver and a vase containing one hundred guineas. The salver bore the following inscription:—"Presented to Dr. Inglis, with a purse of gold, on the occasion of his leaving Worcester, by his numerous friends, as a token of esteem, and in recognition of his valued services to the Infirmary and Dispensary: November, 1875." We heartily congratulate Dr. Inglis upon this expression of goodwill and of appreciation of his work in Worcester.

THE supply of subjects to the schools this session is so much less than usual that complaints are almost universal among the teachers of anatomy. In many schools the number of bodies which have been received is only one-half of that which they had at a corresponding date last year, and we much fear that the influence of this diminished supply will be greatly felt at the January examinations.

DR. CHARLES WARDEN has resigned the office of senior honorary surgeon to the Birmingham Lying-in-Charity, having been associated with it for nearly a quarter of a century in its present form, and as the Lying-in Hospital for Midwifery and the Treatment of Diseases of Women and Children. The General and Medical Committees passed resolutions highly complimentary to Dr. Warden as to his valuable services, and expressive of much regret at losing them.

A MEETING of the Society of Medical Officers of Health was held on Saturday last, when an interesting paper on Sanitary Administration in India was read by Mr. W. R. Cornish, sanitary commissioner in Madras. The discussion was introduced by Dr. Druitt, who has recently returned from India, and some pertinent observations on the subject were made by the President and Dr. Letheby.

WE understand from a Calcutta newspaper that, in compliance with orders recently issued by the Government of India, the arrangements and equipments for the Prince of Wales's staff have been created into a special department, a portion of which will accompany His Royal Highness during his tour. The European and native apothecaries who attended on the Duke of Edinburgh during his visit to India have been appointed to the new medical establishment.

A CASE which illustrates the need that exists for the obtainment of a higher class of attendants on the sick in some of our public charities came before the Salford Borough Police-court a few days ago. Two nurses employed in the small-pox and fever wards of the Salford Workhouse were sentenced to twenty-one days' imprisonment for drunkenness, and it was stated that during their debauch they left thirteen or fourteen patients entrusted to them quite unattended.

WE are glad to be enabled to announce that Sir John Glover is progressing favourably towards recovery under the professional treatment of Mr. R. G. Butcher, of Dublin.

MR. WILLIAM COLLES, Regius Professor of Surgery in the University of Dublin, has been appointed Surgeon in Ordinary to Her Majesty in the room of the late Mr. Hamilton.

REPORT
OF
The Lancet Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

ROYAL MEDICAL COLLEGE, EPSOM.

WE have so frequently advocated the claims of the Royal Medical College that we feel no special introduction is needed on this occasion to explain the aims and objects of the institution. The College is situated on the north-west slope of the Epsom Downs, about one mile from and eighty feet above the town of Epsom. The buildings consist of a main block, which contains the dining hall, the dormitories, and the school and class rooms; attached to this block is the "Albert Memorial Wing," set aside for the residence of the pensioners. At the southern extremity of the main building is a residence for the head master, with accommodation for forty boarders; this house was presented to the College by the munificence of Mr. Erasmus Wilson. The out-buildings in the back playground consist of a gymna-

sium, two swimming-baths, a lavatory, and a range of closets and urinals; all these are closely connected with the main building. In the large front playground is a fives-court and the chapel. All the principal buildings are of red brick, faced with freestone, and are well and substantially constructed; they rest directly on the chalk. The aspects are north-west and south-east, the latter being sheltered by the down that rises behind the College. At the present time there are residing at the College 50 foundation scholars, who receive their education free; 165 resident pupils, paying, if the sons of medical men, from £48 to £51 a year, or, if not the sons of medical men, £70; and 24 pensioners, each of whom has a set of chambers allotted, and receives, besides, certain other privileges. In addition to these must be reckoned the tutorial staff, the servants connected with the institution, and the servants and relatives living with the pensioners,—making in all a population of about 300.

Drainage and water-supply.—Formerly the drainage of the College was received into large cesspools, situated at the north-west extremity of the College grounds. This arrangement was found to be so extremely unsatisfactory that it was determined to make a junction with the town system of sewage. This has been effected at a cost to the College of £400. The College drainage now consists of two sewers; the principal one on the high level, which is connected with the main block, and passes behind the buildings to the end of the Albert wing, and then, turning downwards, makes a junction with the smaller sewer, which comes from the master's house, about fifteen yards from the lodge gates, where the town system may be said to commence. The ventilation of the College drains is effected by three untrapped water-pipes, which are placed at points of the buildings where there can be no possibility of sewer gas escaping from them into the building; in addition, at the back of the school, at the commencement of the high-level drain, is a man-hole with an open grating. We do not think the ventilation provided sufficient, considering the College stands eighty feet above the level of the town, and the pressure consequently in the upper part of the sewers must be very great. We should therefore recommend that increased ventilation be effected at the junction of the College and town drains, so that all possibility of the town gases making their way to the building may be prevented. The substitution of an open grating for the present closed cover of the man-hole, in this situation, would doubtless be sufficient; but a ventilating shaft would be more effectual, and perhaps safer. The water supplied to the College is furnished by the Epsom Town Waterworks. The supply is supposed to be constant; but, owing to the scarcity of water, the mains are often empty for some hours, and an insufficient quantity furnished to the school. In order to keep an adequate supply on the premises, a large open tank has been built on the top of the central tower, in which a considerable quantity of water is stored. For some time past complaints have been made that the water when drawn (generally the water first taken in the morning) has been thick and turbid, yielding a rusty deposit. This condition of water has been noticed only in the supply of the main building; and the Albert wing that furnishes the master's house, though taken from the same point in the town mains, has hitherto been free from deposit. This points to some local defect in the service of the main buildings, certainly not to any general contamination of the water-supply itself. Mr. Elkington, the architect of the College, has offered, we think, a very reasonable explanation of the cause of the deposit, and, though it is difficult to speak positively till the necessary examination be made, we venture to predict it will be found correct. It appears the main, on entering the building, gives off two lateral branches for the wings; these ascend slightly before their ultimate distribution. Mr. Elkington thinks that these have become corroded, and that the rust from these is sucked up during the periods of intermittency into the pipes connected with the whole service. The fact that the water is foulest in the morning gives additional support to this view, since the intermission, when it occurs, is usually during the night time. In all other respects we were satisfied with the purity and quality of the water supplied, and we were glad to see that the additional precaution had been taken of having Lipscombe filters attached to all taps and cisterns from which water for drinking purposes could be obtained. We think, however, the Council ought to insist on the town water-supply being made constant without delay, for till that is done there is danger at any moment of typhoid being introduced into the school from the town; the experience of Over Darwen, Lewes, and Croydon ought not to be disregarded. If the Council fail in obtaining a constant service, they should, we think, endeavour to obtain a water-supply of their own. They have on their premises a well, sunk in the chalk, about 130 feet deep, yielding an abundant supply, and if this on analysis prove as good as it is abundant we think that, under any circumstances, they would be wise to employ it. The cistern at the top of the tower ought also to be covered in; at present it is exposed to large quantities of smoke and soot from the chimneys close to it.

General sanitary details. — The halls, school and class rooms, dining-hall, and dormitories are all lofty and well-lighted, but we cannot say well ventilated. Certainly plenty of fresh air enters the buildings, but, to judge by the draughts, it passes in with too great velocity and is irregularly distributed. We can fully understand the complaints that have been made with respect to the cold and draughty corridors, and we hope the Council will do something to remedy this evil before next term begins. The introduction of two or three Galton stoves in each corridor would materially warm the air of the building and improve the ventilation by equalising the currents of air. The school and class rooms are excellent, and, for the accommodation afforded, may compare with any school in the kingdom. In the large school-room and in several of the class-rooms, a rearrangement, however, of the seats would be advisable, so that the shadow of the boy may fall to the right or left of him, and not on his book or copy. The school is provided with two excellent swimming baths, one hot, the other cold, and also a gymnasium; indeed, we cannot speak too highly of the liberality of the Council in providing for the general comfort and convenience of the boys. In the back playground, near the school-rooms, is a range of privies and urinals; the former have an arrangement for flushing, which is done once a day at least, and is very effective. The urinals are of slate, with an iron-pipe arrangement for flushing. As usual, when the water was turned on we found that, instead of a good strong stream, only ineffectual little dribblets trickled down the slabs. The only efficient method we have seen for keeping urinals clean is a simple but extremely powerful tap facing towards the urinal: this should be turned on twice a day. In the back playground is a tap to which the boys have access, all the water supplied having passed through a Lipscombe's filter. All waste and overflow pipes are disconnected from the sewers, and are discharged over well-trapped gratings. Where possible, the rain-water pipes have been disconnected; we should like to see this plan adopted with all, and the rain-pipes at present used for ventilating the drains changed for proper ventilating shafts. We were pleased to see that some attempt had been made to utilise the rain-water by collecting it in cisterns in different parts of the buildings; if our suggestion of cutting off the remaining connected rain-pipes be carried out, the soft-water supply of the College would, if stored, be greatly increased. The closets in the College are fitted with separate cisterns; none that we saw had screw taps, and the architect distinctly assured us that no such taps were used in the building.

The precautions employed to prevent the introduction and spread of infectious disease.—On returning to school, each pupil is expected to bring with him a certificate that he is in good health, and has not been exposed within one month to any disease of an infectious character. In the head master's house a general statement is required in addition, on entrance, with respect to the general state of health and the infectious diseases he has had. The medical officers of the school (Dr. Jones and Dr. Barnes) this term, on their own responsibility, examined every boy on his return to school, and in future a record of the boy's height, weight, physical development, and illnesses is to be kept, the examination to be made every half-year on the boy's return from

home. We think the Council ought officially to acknowledge the additional and valuable labour thus voluntarily undertaken by their medical staff, and that the "Health Register" should become a recognised feature in the management of our "Medical College." It is a rule for all boys that fall out of school to be seen by the medical man at his next visit; we would suggest, as an extra precaution, that the patient should be isolated in a sick room, however trivial the complaint, till the visit had been made. The great want at Epsom hitherto has been a sanatorium for the isolation of infectious cases. A building for this purpose is now to be erected, affording accommodation for twenty-four patients, and the site selected, though somewhat near the Albert wing, is as far as possible from the school itself. At the end of the last term, and the beginning of this, scarlet fever made its appearance in the school; the first outbreak was limited to seven cases, the last to five. We are fully satisfied with the arrangements made by the medical officers of the school for the accommodation and isolation of the cases at present under treatment; the fact that the epidemic has not spread shows how effective those measures have been.

General remarks on the school hours, work, meals, &c.—School commences at 7 o'clock in the morning; at 8 the boys go to breakfast; at 9 to chapel; at 9.30 the boys go to work again till 12.30; at 12.45 the first dinner to half the school, and at 1.45 the second dinner for the remaining half is served. School reassembles at 3.30, and continues till 5.30; then chapel at 6, and tea at 6.30. School again at 7, lasting till 10, with a quarter of an hour allowed for supper. These hours give a daily total for work of eight hours and three-quarters on whole school days, and six hours and three-quarters on the two half-holidays. We consider these hours to be in excess of what they should be. The time of work at our great public schools generally averages but seven hours on whole school days; whilst on half-holidays, which at many schools are every other day, the work is from four to five hours. We are aware that at Epsom few of the boys are intended for a university career, and that they are chiefly trained with a view of becoming candidates in the competitive Civil Service Examinations, or for the severe Matriculation Examination at the University of London—examinations which require a considerable range of subjects to be taken in hand. Still, eight hours and three-quarters' work is a very severe strain on boys of twelve or fourteen, and should only be imposed on the older boys, and those who are preparing for an immediate examination. We would venture to suggest that afternoon school should not commence till 4.30 and continue till 6, and no work should be done by boys under fourteen after 8.30. This would reduce the number of working hours for juniors to seven a day, and for seniors to eight; moreover, this arrangement would give the boys an extra hour for afternoon play. The meals are four in number: breakfast at 8, of bread-and-butter; a substantial meat meal at the midday dinner; tea at 6.30, of bread-and-butter; supper at 9, with bread and cheese. We think these meals are sufficient, and we do not consider an extra meat meal necessary. Complaints have reached us that sufficient time is not allowed the boys at dinner, especially at the second meal. This, we fancy, must be their own fault, in their desire to get to the playground. If such is the case it could be easily remedied by insisting on the boys remaining in hall at least half an hour, and allowing none to leave till that time has expired.

In conclusion, we must bear testimony to the excellence of the domestic arrangements and the care and nicety with which the food is prepared. No one can visit the Royal Medical College without feeling impressed with the great and noble work that is being carried on, and how unwearied must have been the efforts of all connected with the establishment to bring it to its present perfection. Apart from the merely charitable aspect of the institution, it is a fact of no mean significance that nearly two hundred boys are receiving an education almost equal in some, and vastly superior in other, respects to that given by our large and expensive public schools, at a cost to the parents of barely £50 a boy. The Council, in building the new sanatorium, will be put to considerable expense. We hope the members of the profession and the public will continue to give them liberal support, for without that it is impossible for any of the suggested improvements to be carried out.

ANSTIE MEMORIAL FUND.

A MEETING of the General Committee of the Anstie Memorial Fund will be held on Tuesday, the 30th of November, at the House of Dr. George Johnson, 11, Savile-row, at 8.30 P.M. precisely. The following report of the Executive Committee will be presented, and resolutions embodying its recommendations will be proposed for adoption:—

The Executive Committee of the Anstie Memorial Fund beg leave to report to the General Committee that the accounts of the Fund were closed on the last day of February, although a few contributions have since been received. The total amount collected was £2548 8*s.*, and the total expenses of the collection were £153 8*s.* 4*d.* Of this amount the sum of £50 was defrayed by a single donation given for this especial purpose, so that only £103 8*s.* 4*d.* will rank against the fund, leaving a balance of £2444 19*s.* 8*d.* available for the purposes for which it was collected. On this balance dividends to the amount of £60 19*s.* 10*d.* have been received, making a total sum of £2505 19*s.* 6*d.*

The purposes of the fund, as defined by the original circular issued by the Executive Committee, were to set up a memorial tablet in some proper situation, and to devote the remainder to the education or advancement in life of Dr. Anstie's children.

The Chapel of King's College naturally suggested itself as the best place for the proposed tablet; and Sir Gilbert Scott kindly undertook to furnish a design in harmony with the decorations of the interior. A considerable time elapsed before this design was prepared, and then an inscription which was approved by the Executive Committee was found not to be acceptable to the Council of King's College. Further delay and much correspondence were thus occasioned; but ultimately the following inscription, which was written by Mr. John Simon, F.R.S., removed all difficulties:—

In Memory of
FRANCIS EDMUND ANSTIE,
M.D. LOND., F.R.C.P.,
PHYSICIAN TO THE WESTMINSTER HOSPITAL,
HONORARY FELLOW OF THIS COLLEGE.
LABORIOUS IN STUDY, ACCOMPLISHED IN PRACTICE,
ARDENT IN LOVE OF TRUTH AND JUSTICE,
STRENUOUS IN EFFORTS FOR THE POOR AND FRIENDLESS,
HE WAS STEADFAST, GENTLE, AND AFFECTIONATE
IN ALL PERSONAL RELATIONS,
AND DEAREST TO THOSE WHO KNEW HIM BEST.
HIS DEATH, WHICH TOOK PLACE ON SEPTEMBER
THE 12TH, 1874, IN HIS 41ST YEAR, WAS CAUSED
BY BLOOD POISONING INCURRED IN THE DISCHARGE
OF HIS DUTY.

Correspondence.

"Audi alteram partem."

ARMY SANITARY COMMISSION.

To the Editor of THE LANCET.

SIR,—In THE LANCET of last week there are some severe reflections on the Army Sanitary Commission, the cause of which appears to have been that the Commission had failed to discover in certain cholera reports submitted to them from India support for one of the many theories of cholera propagation—viz., the cholera water-theory; and the somewhat extensive deduction is drawn from this default that there is nobody on the Commission competent to deal with questions of this class.

I am not aware what steps the Commission may take in this matter, and, as Dr. Fayrer, the sanitary adviser and representative of the India Office on the Commission, is with H.R.H. the Prince of Wales in India, I have in my private capacity thought it advisable to ask your indulgence to enable me to state simply the facts of the case, many of which appear not to be known.

First, then, as regards the deduction drawn from the premises. When the Commission was first formed the late Sir Ranald Martin was placed on it as sanitary adviser to the India Office, in which capacity he served till his death. He was succeeded by Dr. Fayrer, and I am quite sure that the simple mention of these two names will carry conviction to the minds of the medical profession that, whatever *laches* the Commission may have been guilty of in the matter of cholera theory, the interests of public health in India, so far as regards an intimate acquaintance with every point of importance in the most recent advances of pathology and etiology of Indian diseases, are as well, and have been as well, represented within the Commission as without it.

Second.—The Commission is composed of representatives from the War Office, India Office, Royal Engineers, Army Medical Department, and Local Government Act Office, and it took its present form in consequence of a recommendation of the Royal Commission on the Sanitary State of the Indian Army. It acts under instructions from the Secretary of State for War, and the Secretary of State for India; its functions are of a practical sanitary kind, and, as regards India, are directed to the improvement of barracks, hospitals, married quarters, the drainage, conservancy and water-supply of military stations, improvements in bazaars, native towns, and among the civil population generally. Many years ago suggestions on all these matters of principle were sent to India, and the Commission has ever since been in communication with the authorities on them. But although the Commission has no power to undertake pathological or etiological investigations, there is nothing in this department which escapes its notice, or the notice of the Sanitary Department in India. There is, indeed, no publication in which any new matter on these subjects is set forth in England, Germany, or France, which is not transmitted as soon as possible to India, and the Indian Government makes a money grant annually for this purpose. There is besides a scientific staff in India engaged on these very investigations. The duty of the Army Sanitary Commission is to use all information of this sort as a basis from which to deduce principles of practical utility, and even this cholera water-theory has been taken into account for a number of years past. The literature of water analysis in India, undertaken at the instance of the Commission, has no equal in Europe. The results of it led to the recommendation by the Commission of certain principles for the protection of water-sources at Indian stations, which, when fully carried out, will render the pollution of drinking-water by cholera material, or indeed by any other impurity, physically impossible. I could give other similar illustrations, but this, as connected with the present subject, will be sufficient to show the use to which etiological doctrines have been and will continue to be put. Of course there are other and most important applications of these doctrines which do not come within the functions of the Commission. These belong to the Army Medical Department under its own chiefs. It is not necessary that any pressure should be adopted in this direction, neither would it be submitted to. There is only one way in which persons holding such doctrines strongly can get them adopted by the Army Medical Service, and that is to support them by facts and reason.

Third.—The executive work of sanitary improvement is all done in India by Government; by its public works department, sanitary and vaccination services, commissioners, municipalities, local magistrates, and even by native village officials; and, as regards regiments and stations, by the great Indian Army Medical Service and Cantonment Committees. In the whole history of human progress there is nothing more remarkable than the advance of sanitary improvement in India during the last ten or twelve years. There is nothing in the West that can be compared with it. The work is very far from being done, but very much has been already accomplished.

Fourth.—With regard to criticisms which have been made on the form and contents of the Commission's "Remarks," it seems necessary to state that these are determined by the nature of the documents submitted to the Commission from every part of India, and by the terms of the reference. The Commission has considered it to be advisable to give a terse account of the principal parts of the documents (a recent one contained 500 printed folio pages), as well as to call attention to the main practical points, which are all considered with reference to the principles of sanitary improvement long since adopted in India. It need scarcely be said that the remarks embody the views of the sanitary and engineering advisers of the India Office serving on the Commission. No practical difficulties have arisen from the form of the "remarks," and they have aided in the advance of sanitary improvement.

But, after all, the main question is, What has been the practical result of all this work, even admitting that it is small in amount when compared with the vastness of the field? The reply is, that wherever sanitary work has been done, in cities, municipal towns, villages, and public institutions, there has been improvement in the public health, of which striking examples are afforded by improved gaols, many of which may now be used as illustrations of what may be done for the native population. But the British Army, from its complete system of statistics, affords the most striking illustration of the effect of these improvements. At the time when the Royal Commission on the Sanitary State of the Indian Army began its inquiry in 1859–60, the average death-rate among British troops in India was 69 per 1000 per annum. Last year (1874) it was a shade above 13¼ per 1000 (13 58). This, however, is a fact, not an average, because there was little cholera about (only 11 deaths in the whole army). In old times the sick in hospital averaged about 10 per cent. The proportion is now less than half this amount, the difference representing the number of men in the ranks who formerly would have been in hospital. Perhaps no better justification of the present method of carrying out Indian sanitary work could be adduced. As already stated, this communication is simply intended to state facts, and not to discuss controverted questions.

I am, Sir, yours, &c.,

London, Nov. 24th, 1875. JOHN SUTHERLAND, M.D.

THE CASE OF SUPPOSED BLOOD-POISONING.

To the Editor of THE LANCET.

SIR,—With reference to the interesting case of supposed "blood-poisoning," the particulars of which are given by Dr. Dyce Duckworth in the last number of THE LANCET, will you permit me to suggest, with every respect for his opinion, that the evidence against the symptoms being due to malignant disease in the thorax is scarcely conclusive.

I understand from the report that Dr. Duckworth looks upon the enlargement of the thyroid body present in that case as part of a general infection of the lymphatic system; but in a case of primary cancer, occupying the mediastinum and root of the right lung, which I met with not long ago, and reported in a contemporary of April the 25th, 1874, enlargement of the thyroid gland was one of the earliest and most marked symptoms. It was uniform, firm, and smooth, and I regarded it merely as an evidence of obstructed circulation through the superior vena cava.

Primary intra-thoracic cancer, moreover, evinces a decided preference for the right lung, and it is remarkable that this was the side on which the respiratory changes described by Dr. Duckworth were heard. In my case there was the same paroxysmal pain and the same absence of pyrexia.

Dr. Duckworth states that at a time when the thyroid body was manifestly enlarged the patient "did not feel unwell." I think this was scarcely likely to be the case if septicæmia was the cause of the enlargement. In septicæmia also was pyrexia likely to be continually absent? As there was no evidence of leukæmia I cannot help thinking that the symptoms may have been due to malignant disease implicating the bronchial glands and root of the right lung.

I have only ventured to make these comments as I have seen enlargement of the thyroid body in the case to which I refer, and also because it is evident that primary intra-thoracic cancer may go on, almost to the very close of the patient's life, without producing any symptoms save those which are due to obstructed circulation and respiration, and to the effects of nerve-pressure; emaciation, cachectic appearance, pyrexia, and night-sweats being possibly altogether absent.

I am, Sir, yours truly,

GEO. F. ELLIOTT, M.D.,

Nov. 22nd, 1875. Physician to the Hull Infirmary.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examinations for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on the 18th inst.:—

Blakiston, Arthur A., L.S.A., Wallington, Surrey.
Carcenac, Edward, Mauritius.
Carey, Adrian, Guernsey.
Cooper, Henry D., L.S.A., Bengal.
Darker, Frederick W., Peckham.
Dobbie, Robert J. A., L.S.A., Budleigh Salterton.
Don, Arthur C., Hammersmith.
Gairdner, John, Maidenhead.
Godfrey, Benjamin G., Clapham, Surrey.
Harmer, James R., L.S.A., Birmingham.
Hopgood, Wm. C., L.R.C.P. Ed., Chipping Norton.
Jackson, Philip J., L.S.A., Merton, Surrey.
Knight, John T., L.S.A., Sandiacre, Derby.
Lewis, Joseph J., Milborne Port, Somerset.
Lloyd, James H., Milner-street, Chelsea.
Mathias, James, L.S.A., Cardigan.
Price, Henry E., Stamford-hill.
Shaan, Frederick, Brompton.
Sherrin, Francis M., Camden-road.
Smith, Stephen M., Surbiton, Surrey.
Steddall, Thomas W., Pontypridd, South Wales.
Tredinnick, Ernest, Camborne, Dorset.
Twining, Frank T., M.B., Southport, Lancashire.
Ward, Charles, Greenstreet, Kent.

Of the 78 candidates examined during last week, 46 were approved and obtained their diplomas; 14 passed the examination in Surgery, and when qualified in Medicine will be admitted Members; and 18 failed to satisfy the Court of Examiners, and were referred to their professional studies for six months. There were also 18 candidates admitted members who had passed in Surgery at previous meetings of the Court, and who had subsequently obtained medical qualifications recognised by the College.

The following gentlemen passed the first part of the Professional Examination for the Fellowship of the College on Tuesday and Wednesday last:—

E. B. Gardner, St. Thomas's Hospital; W. L. Barker, St. George's Hospital; J. W. Smith, Guy's Hospital; G. Jackson, University College; F. Buller, Toronto and St. Thomas's Hospital; A. W. Pritchard, Bristol; F. F. Chavasse, Edinburgh and Birmingham; J. L. Jequet, Westminster Hospital; W. R. Harrby and A. S. Underwood, King's College; P. H. E. Freund, St. Thomas's Hospital; W. J. Roeckel and C. W. M. Moullin, St. Bartholomew's Hospital; A. H. Young, Edinburgh; E. W. Cottle, St. George's Hospital; A. Hensman, University College.

For the Final Examination for the Fellowship, which commenced on the 25th inst., there were 13 candidates.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Nov. 18th:—

Blakiston, Arthur Alexander, Wallington, Surrey.
Harmar, Jas. Raffles, Newhall-street, Birmingham.
Gathergood, B. W., Terrington St. John's, King's Lynn.
Maples, Reginald, Spalding, Lincolnshire.
Pilkington, Henry, Liverpool.
Williamson, Geo. Edward, North Shields.

The following gentlemen passed the Primary Professional Examination on the same day:—

John Chadwick, Manchester Infirmary; J. Henry Lee Macintire, Middlesex Hospital; Gordon Money Roberts, Guy's Hospital; George William Sidebotham, Manchester Hospital.

THE "Scotsman" states that Professor Huxley, having received the necessary sanction of the Lord President of the Privy Council and of the Royal Society, has accepted the invitation of the Senatus of the University of Edinburgh to take charge again of the Natural History Department during next summer session, Professor Wyville Thomson's term of absence having been prolonged in order to enable him to complete the work he is charged with in the *Challenger* Surveying Expedition.

BEQUESTS, &c., TO MEDICAL CHARITIES.—The Annual Report of the Taunton and Somerset Hospital acknowledges legacies of £1000 under the will of Major-General Waddington, £500 under that of Mrs. Lark, and £100 under that of the Rev. C. J. Allan, and an investment of £1000 New Three per Cent. Annuities by Lady Anna Gore Langton. Mr. Abraham Mitchell has given £1000 between the three medical charities at Bradford, Yorkshire—viz., the Infirmary, the Eye and Ear Hospital, and the Fever Hospital. Mr. Wm. Robinson Johnson, of the Cliff, Wybunbury, Cheshire, bequeathed £500 to the Manchester Infirmary, £100 to the Chorlton-in-Medlock Dispensary, and £100 to the Ardwick and Ancoats Dispensary. Mr. Wood, of Longthwaite, bequeathed £250 each to the Cumberland and Westmoreland Convalescent Institution at Silloth, the Cumberland Infirmary at Carlisle, and the West Cumberland Infirmary at Whitehaven. Lord Berwick has given £100 towards the building fund of the Eye, Ear, and Throat Hospital, Shrewsbury. Miss Calvert Jones, of Bath, has given £100 to the Swansea Hospital. The Dental Hospital of London has received £100 under the will of Mrs. Carmichael. £100 has been sent anonymously towards the proposed Cottage Infirmary at Andover. The City Orthopædic Hospital, Hatton-garden, has received £100 under the will of Mr. George Bond, and a third donation of £21 from the Fishmongers' Company.

PROPOSED UNITED SYSTEM OF DRAINAGE.—The Improvement Commissioners for the district of Surbiton having applied to the Local Government Board to direct an inquiry with a view of forming the urban sanitary districts of Acton, Chiswick, Croydon, Ealing, East Moulsey, Epsom, Eton, Ham Common, Hampton Wick, Kingston-on-Thames, Richmond, Staines, Surbiton, Teddington, Twickenham, Wimbledon, and Windsor, together with all or some of the rural sanitary districts of Brentford, Chertsey, Croydon, Epsom, Eton, Kingston, Richmond, Staines, Uxbridge, and Windsor, into a united district for the purpose of carrying into effect a system of sewerage, the board have directed Lieutenant-Colonel Ponsonby Cox, Royal Engineers, to hold a preliminary inquiry at the Commissioners' Office, Surbiton, on the 3rd prox.

DR. WILLIAM SEDGWICK SAUNDERS has been placed on the Commission of Lieutenancy for the City of London.

Medical Appointments.

AUSTIN, Dr. J. A., has been appointed, provisionally, Medical Officer and Public Vaccinator for the Parishes of Tongue and Farr, Sutherlandshire, vice M'Calman, resigned.

BEATTY, J., F.R.C.S.I., has been appointed Surgeon to the Rathdown Hospital and Dispensary, Monkstown, Co. Dublin, vice Wm. Plant, M.D., J.P., deceased.

BOODLE, R. M., M.R.C.S.E., has been appointed House-Surgeon to the Rochdale Infirmary, vice Burke, resigned.

BRIGGS, Mr. W. P., has been appointed Demonstrator of Anatomy in Anderson's University, Glasgow.

BUCHANAN, W., M.R.C.S.E., has been appointed Surgeon to the Chatham Division of the Kent County Constabulary.

BULLMORE, W. K., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Falmouth Borough Urban Sanitary District.

COLE, R. M., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Gloucester Union Workhouse, vice Cookson, resigned.

DAVIES, Mr. D., has been appointed Medical Officer and Public Vaccinator for the No. 4, or Leigh District of the Martley Union, Worcestershire, vice Moore, who was appointed but declined, having been appointed about the same time to the No. 1 District of the Ongar Union.

DEVANY, P. C., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Sligo, and Strand Hill; and Medical Officer of Health for the Sligo Urban Sanitary District, vice Tucker, deceased.

DIAMOND, Dr. J., has been appointed Medical Officer and Public Vaccinator for the Parish of Muthill, Perthshire, vice Core, resigned.

DONOVAN, Dr. J. I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballincollig Dispensary District of the Cork Union, vice Rountree, deceased.

ELLIS, H. D., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the Bournemouth District.

GOVETT, P. W., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 5 District of the Plympton St. Mary Union, and Medical Officer of Health for the No. 5 Sub-district of the Plympton St. Mary Rural Sanitary District, vice Adkins, resigned.

HELSDON, C. V., M.R.C.S.E., has been appointed Medical Officer for No. 4 District of the Andover Union, vice Pike, resigned.

HILL, P. E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Crickhowell District of the Crickhowell Union, Brecknockshire, vice Parry, resigned.

HORSFALL, J. S., L.R.C.P., M.R.C.S.E., has been appointed Public Vaccinator for the Sowerby-bridge District of the Halifax Union, vice Wm. Elliott, M.D., resigned.

JAGIELSKI, A. V., M.D., M.R.C.P.I., has been appointed a Physician in Ordinary to the Margaret-street Infirmary for Consumption and Diseases of the Chest, vice Smith, resigned.

LAIRD, J., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Bosses Point, vice Tucker, deceased.

MACKINTOSH, A., M.D., L.F.P. & S. Glas., L.M., has been appointed Medical Officer of Health for the Clay-lane Urban Sanitary District.

PACKER, W. H., L.S.A.L., has been appointed Junior Assistant Medical Officer to the Gloucestershire Lunatic Asylum, near Gloucester, vice Cassan, appointed House-Surgeon to the Royal South Hants Infirmary, Southampton.

SAER, D. P., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Pembroke Urban, and Milford Port, Sanitary Districts.

SARJANT, J., M.D., L.R.C.P.Ed., M.R.C.S.E., L.M., has been appointed Medical Officer and Public Vaccinator for the No. 4 District of the Hailsham Union, Sussex.

SEAGRAVE, C., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Clonmany Dispensary District of the Inishowen Union, Co. Donegal, vice Coyne, resigned.

SHEWEN, A., M.D., has been appointed Assistant-Physician to the Metropolitan Free Hospital.

STOKES, Mr. W., Professor of Surgery, Royal College of Surgeons, Ireland, has been appointed a Governor of the House of Industry Hospitals, Dublin, vice Hamilton, deceased.

TERRY, W. F., M.R.C.S.E., has been reappointed Medical Officer of Health for the Tiverton Urban Sanitary District: £50 per annum.

THOMAS, L., L.R.C.P.Ed., L.F.P. & S. Glas., L.M., has been appointed Medical Officer and Public Vaccinator for the Amlwch District of the Anglesey Union, vice Hughes, resigned.

WEBB, Mr. V. G., has been appointed Demonstrator of Anatomy in Anderson's University, Glasgow.

WILSON, J., M.D., C.M., M.R.C.S.E., has been appointed a Physician to the Worcester General Infirmary, vice Inglis, resigned.

WOOD, W. E. R., L.R.C.S.Ed., has been appointed a Resident Physician's Assistant at the Middlesex Hospital, vice Davis, whose appointment has expired.

Births, Marriages, and Deaths.

BIRTHS.

BAKER.—On the 21st inst., at Walter House, New Romney, Folkestone, the wife of Charles Eaton Baker, M.R.C.S.E., of a daughter.

BOGGS.—On the 21st inst., at Paris, the wife of Alex. Boggs, M.D., late of H.M.'s Indian Army, of a son.

HEMSTED.—On the 17th inst., at Wellingborough, the wife of Edwin Hemsted, M.D., of a daughter.

LIDDARD.—On the 16th inst., at Ladbroke-grove-road, the wife of Thomas Liddard, L.R.C.P.L., of a son.

POTTINGER.—On the 23rd inst., at Melville Hospital, Chatham, the wife of Robert Pottinger, Deputy Inspector-General of Hospitals and Fleets, of a daughter.

SMITH.—On the 15th inst., at Worthing, the wife of Cleveland Smith, M.R.C.S.E., of a son.

MARRIAGES.

GUNN—GUNN.—On the 17th inst., at Edinburgh, John Jamieson Gunn, M.B., to Isabella, daughter of the late Robert Gunn, Esq.

RUSSELL—BREWER.—On the 17th inst., at St. Luke's, Westbourne-park, George Ireland Russell, M.R.C.S.E., to Emma, widow of the late John Brewer, Esq.

DEATHS.

BROWN.—On the 27th ult., on board the Steam-ship "Sumatra," on the voyage from Aden to Bombay, James Brown, M.B., C.M., Surgeon in the P. & O. S.N.Co.'s Service.

BROWN.—On the 14th ult., at Fraserburg, Cape of Good Hope, John Henry, infant son of John Brown, M.D., L.R.C.S.Ed., aged 7 months.

CHAPMAN.—On the 19th inst., at Leckhampton, Henry Thos. Chapman, F.R.C.S.E., aged 69.

EATON.—On the 15th inst., at Hamilton House, Moffat, James Eaton, M.D., formerly of the Hon. E.I.Co.'s Service, aged 69.

GREENUP.—On the 23rd inst., at Farnworth, near Warrington, Henry Greenup, M.D., aged 65.

HENDERSON.—On the 16th inst., at Scorton, Yorkshire, J. F. Henderson, M.D., aged 32.

JONES.—On the 17th inst., at Weston-super-Mare, E. S. Jones, L.R.C.P.Ed., aged 31.

ROBERTS.—On the 17th inst., at Holyhead, John Roberts, L.R.C.P.Ed.

WARD.—On the 16th inst., at Northbourne, Chobham, Samuel M. Ward, M.B., aged 40.

WEBSTER.—On the 19th inst., at Dulwich, Geo. Webster, M.D., aged 78.

WILSON.—On the 15th inst., at Whitby, John Wilson, M.D., aged 82.

WOODS.—On the 19th inst., at Rathfriland, Co. Down, William Woods, L.R.C.S.Ed., aged 64.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

VIVISECTION.

DR. ARTHUR GAMGEE, of Owens College, in a lecture at the Manchester Athenæum a few days ago, justified the restricted employment of experiments on living animals on the ground of the important discoveries which by its means had been made for the benefit of humanity, and the possibility of such experiments being performed with the infliction of but little real suffering on the subjects of them. The lecturer pointed out, however, that many interesting experiments are made on the living tissues of animals that had just died, which experiments, though properly included in the term "vivisection," involve no suffering at all. After deprecating the indiscriminating outcry which had been raised against physiological experimentation, Dr. Gamgee expressed his belief that the forthcoming report of the Vivisection Commission would be of a nature to set aside the fears and apprehensions which had arisen in the public mind, and that the Commissioners would show that the horrifying statements which had been made could not be borne out by facts.

ARISTOTLE'S NOTION OF RIGHT-HANDEDNESS.

MR. PEARSON, of Emmanuel College, lately read a paper before the Cambridge Philosophical Society on "Aristotle's Notion of Right-Handedness," and added some remarks on a theory of his own on the subject. After referring to the paper by Dr. Hollis on this subject, communicated last year (Nov. 30th, 1874: *Journal of Anatomy and Physiology*, vol. ix., p. 263), the speaker stated that he had been led by Aristotle's great reputation to inquire what his views on the subject might have been. Partly from a perusal of much that Aristotle has written on the subject, but mainly from the new Index by Prof. Bonitz, he gave a *résumé* of the passages bearing on the subject. These passages seemed to show that Aristotle considered (1) that the right hand or side was naturally the source or origin of motion, (2) that in nearly all living creatures capable of motion it is the better or stronger side, (3) but that while the heart is always the origin of vitality, it is in the human race only set towards the left side of the body; in all other living creatures it is in the centre of the body or trunk (*ἐν μεσῳ κεῖται τοῦ ἀναγκαίου σώματος*). And though it may be a fair question how far Aristotle was misled by the preferential use of the right hand by the human race to attribute an excellence in the right side to the animal world, there can be no mistake about the distinct language in which he does so. Some observations were added about the terms in which Mr. Lewes in his work on Aristotle (1864) criticises some errors into which that writer has fallen in his works on Natural History, while it was admitted that he is probably right in considering that there is no reference in Aristotle's writings to the anatomical examination of any but animal subjects; though the fact that Macrobius ascribes to Erasistratus and Herophilus, two celebrated physicians of the succeeding generations, the practice not only of dissection but of vivisection of human bodies, shows, if the story is true, that public opinion could not have been quite unprepared for it. Mr. Pearson also referred to a passage in the *Encyc. Britann.*, art. Comp. Anatomy (§§ 202—205), ed. 1810 (but not occurring in later editions), in which the preferential use of the right hand is discussed, and ascribed to a natural peculiarity in the form of the subclavian and carotid arteries on that side, and in which it is stated that a similar preference for the right side may be traced in some dogs, if not in horses. The speaker said, however, that he would not answer for the existence of such a preference himself in those animals, nor in the lion and camel, to which Aristotle (and Pliny after him) especially ascribe it. He concluded by exhibiting a lobster, of which the right claw is distinctly larger and stronger than the left, as is specially mentioned by Aristotle (*οἱ καρκινοὶ...τὴν δεξίαν ἔχουσι χηλὴν μείζω καὶ ἰσχυροτέραν...*).—Mr. Neville Goodman considered that the paper had only shown the superiority of the inductive to the speculative method of reasoning, although proving Aristotle's skill in adducing facts from the great repertory of nature in favour of his own view. He quite admitted that many facts indicate the right side as having a preferential motor function. In addition to the examples given, the whole order of Gasteropods were mentioned as having their chief organs on the same side, while the ordinary snail exhibits an excessive development in the same direction. To this rule, however, there are many exceptions. Again, the flat-fish (Pleurovectidæ), though quite asymmetrical in their form, have not by any means always their motor function to the right; the sole being generally developed to the right, the turbot to the left. He doubted the preferential use of the right side in animals; and though in ancient art the left leg is advanced, the position he thought purely conventional.

Mr. S. C. Ashley.—We regret we cannot comply with our correspondent's request.

TYPHOID AND DISTEMPER.

To the Editor of THE LANCET.

SIR,—The communications published in your journal from "H. H." and Mr. Smithard, relative to the supposed connexion between distemper in the dog and typhoid in man, open up a question of especial interest to us veterinary surgeons.

Whilst fully admitting the possibility of such a mode of origin of enteric as that suggested by "H. H.," my experience of distemper in the dog is that no fever of any kind has ever seemed to be communicated to any of the attendants on many cases, nor after post-mortems thereof. A family employing a coachman, and calling in a veterinary surgeon to attend upon a Newfoundland dog, would presumably occupy a *large* house. The family being from home, the coachman *slept* therein; the watercloset and cistern arrangements having been at comparative rest some time, if as imperfect as they are in many large houses, might have allowed an emission of sewer gases, or contaminated the water-supply, of which probably the coachman and his guest partook in some form or other; the coachman, imbibing (and perhaps inhaling) larger or repeated quantities of the water or gas, or both, succumbed. If the house was subjected to the precautions which the occurrence of a case of typhoid would render imperative before reoccupation, the non-appearance of further cases therein would not exclude my hypothesis that the enteric of the coachman and groom might be due to causes referable to the house.

As the subject is one of undoubted importance, it would be satisfactory to be assured that the probable causes adverted to with respect to the domicile had been carefully eliminated.

I am, Sir, yours faithfully,

THOMAS PATON,

Dublin, Nov. 17th, 1875. Veterinary Surgeon, Army Service Corps.

Mr. Henry M. Fernie.—The qualifications are very good, but are not in accordance with the copy of the rule as sent to us in our correspondent's letter. The rule of the infirmary should be adapted to the existing state of law and opinion.

MANCHESTER ROYAL INFIRMARY.

DR. J. E. MORGAN, Physician to the Manchester Royal Infirmary, has addressed a third letter to the *Manchester Guardian* in reference to the removal of the institution with which he is connected—a subject on which we have already commented. In this communication Dr. Morgan enters into a consideration of the part of Manchester most suitable for a new hospital, and points out the merits of the site selected by the Medical Committee for the building—namely, a plot of ground of twenty-one acres at Rusholme, on the southern side of the town. The claims of this site are made to rest on its possession of the four features which, according to Miss Nightingale, ought to characterise the position of a hospital: "First, and before all others, purity of the atmosphere; second, the possibility of conveying the sick and maimed to it; third, accessibility for medical officers and for the friends of the sick; fourth, convenient position for a medical school, if there be one." The number of beds occupied in the present infirmary averages 200, but the proposed hospital would accommodate 400 in-patients, and there would be ground and space sufficient to admit of the construction of new wards, when required, capable of holding 200 additional beds. The cost of the purchase of the land, the erection of the buildings, the furnishing the wards, &c., is estimated at £220,000.

Adelphos.—We are not able to give the required information.

MILITARY MIDWIFERY.

To the Editor of THE LANCET.

SIR,—There is no class of women who are worse off for medical attendance during labour than soldiers' wives; for, above the rank of paupers, they cannot command medical attendance from the union; they are, for the most part, too poor to pay a qualified practitioner; and the regimental officer either finds himself unfit or unwilling to undertake the office of accoucheur. The result is that in garrison towns old "Sarey Gamp" still flourishes with all the disagreeable and dangerous sequelæ of crass ignorance, and the medical officer is frequently sent for to attend some of the most serious accidents of childbirth, resulting from the unskilfulness of such women, who, without the rudiments of the art they profess, are permitted to call themselves midwives and practise in barracks, but only too willing to saddle any responsibilities on the medical officer of the corps. If women and children belonging to a regiment are entitled to "medicine and attendance" according to regulations, surely the authorities ought to provide *qualified* midwives, or hold their own medical officers responsible for the duties; and to illustrate the necessity for such a proceeding I subjoin notes of four cases which occurred in my own practice within a few months.

CASE 1.—A "midwife" called upon me, and asked for "some ointment for the piles" for one of her patients whom she had delivered two days previously, and on giving what passed for a fair description of external hæmorrhoids, she got some gall-and-opium ointment to apply. Two days afterwards she came to say that Mrs. —— was in great pain, and the "piles" were very large. On visiting the patient, I found her in extreme agony, with about eight inches of the rectum protruding, the gut deeply congested from strangulation, and, I need scarcely say, I found a very serious difficulty in returning it, and a tedious convalescence ensued.

CASE 2 was attended by a medical practitioner, who lived three miles from the patient's house. He had spent the greater part of a night with her; the labour was tedious, but without complication, and he left her apparently in the most favourable circumstances. At 8 A.M. I was suddenly called to see her, and on entering the room a few minutes afterwards I found her lying on her back, totally insensible, her arms thrown up over her head, and with one gasp she expired before I was ten seconds at her bedside. I do not know the cause of death, and, strange as it may seem, *no one ever asked me!*

CASE 3.—At the request of a "midwife" I was sent for to see a woman who had been delivered of a child ten hours previously, and on my arrival I was informed that the head of a second child was "in the birth." On examination I found the placenta lying in the vagina, and it was removed without the slightest difficulty. This the midwife had mistaken for a second child's head, and so entailed upon me a three-mile walk on a cold and dirty night.

CASE 4.—Also attended by a pseudo-midwife. When called I found the placenta had been retained for *fourteen hours* without any effort having been made to remove it. There was hour-glass contraction of the uterus, and it was only by the greatest perseverance and care that it could be extracted, much exhaustion and a long convalescence being the result.

There was also a fifth case, resulting in puerperal fever and death, in which I had reason to believe that retained placenta was the *origo mali*.

Yours faithfully,

November, 1875. ROBERT NELSON, Staff Surgeon, late R.M.A.

"SOCIAL PURITY ALLIANCE."

MR. JOHN JACKSON, secretary of the above Society, sends us a disclaimer. The object of the Alliance is "to promote the practical recognition of the principle that the Law of Purity is of universal obligation on all men and all women alike, and thereby to counteract the causes of Prostitution." Mr. Jackson indignantly repudiates any connexion between Mr. Theodore Tilton of New York and the Alliance.

Alienist.—In the United States the certificate of one physician is held a sufficiently valid proof of the insanity of a person. The law requiring the certificates of two practitioners on each was repealed in 1850—a retrograde step in the opinion of many. The form of certificate is as follows:—"I, A. B., physician, of the township of ——, in the county of ——, do certify that I have examined into, or am acquainted with, the state of health and mental condition of C. D., in the township of ——, in the county of ——, and that he is, in my opinion, insane, and a fit subject to be sent to the State Lunatic Asylum."

EPSOM COLLEGE.

WE have received a letter from Mr. J. Taylor, F.R.C.S., enclosing one which he had received from Dr. Barnes at Epsom. We regret that any difference should have arisen between these gentlemen with regard to the treatment of Mr. Taylor's son. It appears that the boy was suffering from chicken-pox, and as Mr. Taylor felt anxious about him, he visited the College, and then considered that his son required medicines. Dr. Barnes resented this interference, and hence the correspondence in question. We agree with Dr. Barnes that the position of the medical officers would be intolerable if they are to be interfered with in their treatment of the cases committed to their care. At the same time the question is one requiring great delicacy and tact in dealing with. On the one hand, the medical officers should make every allowance for the natural anxieties of parents, while the latter should remember that the medical officers are appointed by the Council, who, being themselves members of the profession, are therefore excellent judges of the qualifications of the men whom they appoint to this office. We should say that, except in severe and urgent cases, the parents of the boys ought not to interfere.

Mr. Jas. W. Ayres (Greenwich) is thanked for his communication, but we think that our correspondent's suggestion would be considered an impracticable one.

WATERCLOSETS IN CHURCHES.

To the Editor of THE LANCET.

SIR,—I am on the Committee for rebuilding our parish church, and last year, when the conditions for the architects' competition were arranged, obtained the consent of the Committee that a watercloset in connexion with the church should be a *sine qua non*.

We are now far advanced in the building, and in considering the locality best adapted for a safe to contain the documents and registries, came to the conclusion that the part set aside for the W.C. was peculiarly fitted for the safe, and it was agreed to appropriate it for this purpose. The architect pointed out how in a much more suitable spot a W.C. might be built. Great opposition has arisen to such an erection at all; the clergy oppose it, architects do not like it, and I may add that in the first instance a Church Building Society, from whom we sought a grant, actually almost refused it because there was a provision for a W.C.

I am told that scarcely any church has one, that it is unnecessary, open to all kinds of evils, and I am rather afraid that the idea will be shelved (though I do not intend to withdraw my proposition for one). I believe that it *was* always a necessary addition, and it *is* now much more so when churches are open all day, and some one must be on the spot many hours to take care of the contents of the edifice.

May I then ask, through you, from medical men in all parts whether it is a fact that in the churches near them, and especially in the modern ones, there are no W.C.s, and whether it is within their knowledge that evil has arisen from the absence of what I believe to be a necessary sanitary arrangement?

An early reply will much oblige, yours obediently,

WILLIAM TIPPIN ILIFF, M.D.

Kennington-park-road, Nov. 23rd, 1875.

RELIEVING OFFICERS AND MEDICAL ORDERS.

THE absurdity of the system which gives power to the relieving officer to refuse relief ordered by the medical officer has received another illustration. A poor labourer suffering from starvation and slight pneumonia was ordered by the doctor, on Tuesday, 3 lb. of mutton. The relieving officer declined to give it, and told the poor man's wife that she should have come before the Board met. The next day the order for mutton was repeated, and the sagacious relieving officer refused again, but sent six loaves instead. Meantime the husband was craving for meat, and could not eat bread. His weekly wage prior to his illness was ten shillings. He had five children, three of whom were unable to work. It is therefore easily intelligible that his reserve of vital force was slight. He died on the Friday. The post-mortem revealed nothing but an empty stomach and slightly inflamed lung. The jury requested the coroner to administer a severe rebuke to the relieving officer. They would have done still better to have requested him to draw up a rebuke of a system which allows a relieving officer to withhold relief in such a case, though ordered by a medical officer.

A. B. C.—We believe, first-class fare each way, and one guinea per diem for each day actually and necessarily absent from home.

Dr. H. D'O. Foote.—Yes.

"AFFAIRS IN GLASGOW."

OUR Glasgow correspondent writes as follows —

Dr. Russell has corrected the statement I made to you, "that a somewhat personal and hasty correspondence took place between the superintendent of the infirmary and Dr. Russell." "The fact is," he continues, "I have never written a line to the 'daily papers' on the subject, or directly or indirectly taken any part in the controversy, excepting officially through the minutes of the Local Authority."

As this statement in the first place questions the accuracy of my report, and in the second may mislead anyone not familiar with the dispute, permit me to say that the minutes of the Local Authority are public property. They are duly and fully reported in the daily papers, with the discussions which afterwards ensue. Any remark in the minutes is simply a letter addressed to the editor of the paper, and through the paper to the public.

Dr. Russell has elected to misunderstand the term "correspondence" which I used, and I regret that he has done so. Technically he may be right; practically, I hold, and from the accompanying document and paper which I furnish you, you must observe, that his excuse is a mere play upon words, for the facts of the "somewhat personal and hasty correspondence" have become notoriously public property.

INDUSTRIAL INFANTICIDE.

ONE of those half-told stories—under the guise of medical evidence,—chiefly remarkable for the waste of valuable information, is reported from Wigan. It is stated that an "infant met its death from failure of the heart's action caused by intestinal irritation," consequent upon being suckled by a mother who had been away all day working in a factory. The hypothesis set up seems to have been that the milk had been rendered "sour" by retention for many hours. We offer no opinion as to the plausibility of this presumption. There is probably just enough ground in fact to support a theory of causation something like that propounded. But is the explanation offered the true one? It would be a grave inference, if proved, that mothers labouring should not nurse their offspring, or, nursing, should not be allowed to labour. This was the deduction drawn from the facts. We venture to think that, before any conclusion is arrived at, it would be well to ascertain the precise medical data upon which the judgment is to be based. Unfortunately the Coroner's Court is not available for scientific purposes, and *evidence* is not trustworthy testimony to medical facts, whatever may be its relation to legal truth.

Multum non Multa.—The work referred to is adequate for the purpose, and is recent.

Mr. D. M. Ross.—Supposing the facts to be simply as stated, we do not see how our correspondent could have done otherwise than he did.

T. H. J., (Shirehampton.)—The questions for past examinations have been published in the Army Medical Blue-books.

INCORRECT WRITING.

To the Editor of THE LANCET.

SIR,—On page 299 in "Dougall's Art of Shooting" is the following:—"The difficulty of trapping the hooded crow and of holding the raven when trapped have induced the use of that detestable strychnine, the mere effluvium of which in an apothecary's shop, when making a purchase for a nobleman, so sickened me as to give me a lively horror of it ever since. *Horresco referens.*" Mr. Dougall should be told that strychnine is colourless and *inodorous.* I am, Sir, yours truly,

November 22nd, 1875. T. F.

Z. X. Y.—Yes, the beneficial action of jaborandi on diabetes has been observed, amongst others by Dr. Laycock, who published a paper on the subject in our columns in August last.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received *from*—Sir H. Thompson, London; Dr. Roper, London; Dr. Gwynne, Hampstead; Mr. Vance; Mr. Hudson, Chatham; Mr. McGough, Monaghan; Mr. Hagon, Worcester; Mr. Paton, Dublin; Mr. Jeaffreson, Newcastle; Mr. Barraclough, New Wandsworth; Dr. Cassells, Glasgow; Mr. Meadows, Hastings; Mr. Williams, Barrow-in-Furness; M. A. E. Baines, London; Dr. John Brunton, London; The Honourable Francis Scott; Mr. Fitzgerald, Melbourne; Dr. Boggs, Paris; Mr. Taylor, Wargrave; Mr. Hall, Blackheath; Mr. Jackson, London; Mr. German Reed, London; Mr. Wolff, London; Mr. Webb, Glasgow; Mr. Nankivell, Chatham; Mr. Bell, Uppingham; Dr. S. Ringer, London; Dr. Warden, Birmingham; Mr. Robinson, Denbigh; Dr. Taylor Johnstone; Dr. Thursfield, Bridgnorth; Mr. W. Buchanan, Chatham; Dr. Wardell, Tunbridge Wells; Mr. Ashley, London; Dr. Boyland, Baltimore; Mr. Nelson, Gosport; Dr. Barton Smith, London; Mr. Kite, Welwyn; Mr. Smith, Ware; Dr. Shewen, London; Dr. Elliott, Hull; Dr. Wiltshire, London; Dr. Hope, Chobham; Dr. Smith, Loftus-in-Cleveland; Messrs. Latimer, Plymouth; Dr. Hickland, Portsmouth; Dr. Iliffe, London; Mr. Mills, London; Messrs. Weldon & Co.; Dr. Tuckwell, Oxford; Mr. Harvey, Frome; Mr. Wyon, Bruton; Mr. Bridge, Axminster; Mr. Smith, Watford; Mr. Warton, Gravesend; Mr. Foote, Rotherham; Dr. Railton, Old Trafford; Dr. Beatty, Dublin; Mr. Baker, New Romney; Dr. Dickenson, Stalybridge; Dr. Gilland, Wallingford; Mr. Clever, Lozells; Mr. Brown, London; Mr. R. Bayly, Stourbridge; Dr. Ayres, Greenwich; Multum non multa; An Old Subscriber passing through Brussels; A Subscriber; T. H., Ireland; Edinburgh; A Nurse in Difficulties; Adelphos; The Editor, Co-operative Review; J. F.; A. B. C.; F. R. C. S., Sudbury; F. S. A.; Omega; J. B., &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Brown, Haddington; Mr. Brown, Brighton; Dr. Thompson, Hawes; Dr. Ross, Badcall; Mr. Kavanagh, Coventry; Mr. Morrell, Bradfield; Mr. Barrett, Wolverhampton; Mr. Stead, London; Dr. Stewart, Nottingham; Mr. Ashworth, Bourn; Mr. O'Brien, London; Mr. Holmes, London; Mr. Pettinger, Chatham; Dr. Greenup, Farnworth; Mr. Fox, London; Mr. James, Taibach; Mr. Hodges, London; Dr. Martin, Walkden; B. A., Leeds; Medicus, Glasgow; R. F. E., Rotherham; Medicus, Spennymoor; M.D., Twickenham; B. A., St. Ives; F.R.C.S.; Dessimus; Medicus, Halifax; H. M. J., Swansea; M. D., Brighton; W. O.; D. M.; E. A.; Medicus, Islington.

Surrey Advertiser, East London Observer, Birmingham Morning News, Cork Constitution, Liverpool Post, Lymington Chronicle, Huddersfield Chronicle, Metropolitan, Western Morning News, Manchester Guardian, Newcastle Chronicle, Tavistock Times, Surrey Advertiser, Cardigan Advertiser, Sheffield Telegraph, Worcestershire Chronicle, Leeds Mercury, and *Sheffield Independent* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

THE LANCET OFFICE, NOV. 25TH, 1875.

Date	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Nov. 19	29·69	W.	53	55	...	57	52	...	Hazy
" 20	30·03	N.W.	35	39	...	41	37	0·02	Cloudy
" 21	30·02	W.	37	40	...	45	35	...	Clear
" 22	30·17	N.E.	36	39	...	44	35	...	Overcast
" 23	30·20	N.E.	38	40	...	45	37	...	Overcast
" 24	30·22	N.E.	38	40	...	43	39	...	Cloudy
" 25	30·05	N.E.	34	37	...	...	38	...	Overcast

Medical Diary for the ensuing Week.

Monday, Nov. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Dowse, "On External Mitral Stenosis, with Remarks."—Dr. Crisp, "On a late Epidemic of Scarlatina, Epidemic Sore-throat, and Erysipelas in the South-Western part of Chelsea."

Tuesday, Nov. 30.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Dec. 1.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Heywood Smith: "Notes of a Case of Ruptured Vagina during Labour, with Recovery."—Dr. Wiltshire: "Spontaneous Rupture of the Vagina; Recovery."—Dr. Routh, "On a Case of Extra-uterine Fibroid successfully treated by Gastrotomy."—Dr. John Williams, "On the Mechanical Action of Pessaries."—Dr. Oswald, "On Cæsarean Section."—And other communications.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Prof. Rupert Jones: "Remarks on the Foraminifera, with special reference to their Variability of Form, illustrated by the Cristellarians."

Thursday, Dec. 2.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Harveian Lectures: Dr. Sibson, "On Bright's Disease and its Treatment, considered mainly in relation with Arterial Tension from Blood Contamination."

Friday, Dec. 3.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 4.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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